CENTRAL BANKING

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PREFACE TO THIRD EDITION

In this edition, the book has once more been brought up to date. Although its general form and sequence have been retained, several chapters have had to be considerably revised on account of changed conditions and trends since the publication of the previous revised edition in 1946. Furthermore, a new chapter has been added under the title of 'The Recent Revival of Monetary Policy'.

M. H. de Kock

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CHAPTER I

THE RISE OF CENTRAL BANKING

Evolution of Central Banks. Prior to the commencement of the twentieth century there had been no clearly defined concept of central banking. A gradual evolution had been taking place in various countries over a long period of years, but the process had not always been a conscious one, and a systematic and consistent technique had not yet been developed and formulated. The temperament and discretion of individual managements had played the principal part in the decisions and operations of the bank which had, as it were, become the centre of the monetary and banking system in each of several countries.

In many of the older countries, one bank gradually came to assume more and more the position of a central bank, due mainly to its enjoying the sole or the principal right of note issue and acting as the Government's banker and agent. They were not originally called central banks, but were generally known as banks of issue or as national banks. The regulation of the note issue subject to safeguards imposed by the State, and the maintenance of the convertibility of their notes into gold or silver or both where such was in force, were the principal functions of these banks. In due course, such banks of issue acquired other functions, duties and powers until the term 'central bank' came to be generally used and to have a more or less standardised meaning.

✓Of the existing central banks, the Riksbank of Sweden is the oldest in the sense that it was the first to be established, but the Bank of England was the first bank of issue to assume the position of a central bank and to develop what are now generally recognised as the fundamentals of the art of central banking. The history of the Bank of England is thus universally accepted as illustrating the evolution of central banking principles and technique.

Bank of England. The Bank of England was brought into being by public subscription in 1694 for the express purpose of advancing money to the Government, in return for the privilege of note issue conferred under a charter granted to it in an Act of Parlia-

ment. This privilege was subject to limitations, but with every renewal of its charter the right to issue notes was renewed and extended in exchange for further loans to the Government or for other considerations. The Bank came to acquire at least a partial monopoly of note issue in England in the sense that only banking firms or partnerships of not more than six persons were also permitted to issue notes. It was not until 1826 that other joint-stock banks were granted the right of issue, and then only if they were established outside a 65-mile radius from London. The Bank, however, retained its privileged position in that legislation passed in 1833 declared only its notes to be legal tender. Moreover, under the Bank Act of 1844 the issues of all the other banks were limited to the amounts in circulation at that time, and provision was made for their lapsing in certain circumstances, e.g. in the case of amalgamation with or absorption by another bank. In 1826 the Bank was also authorised to open branches in other parts of England.

Its partial monopoly of note issue, in addition to the gradual expansion of its function as the banker and agent of the Government, placed the Bank of England at an early stage of its career in a special position *vis-à-vis* the other banks. The private banks of the eighteenth century had discovered that there was an advantage in keeping an account with the Bank of England, as it was the bank whose notes commanded the greatest confidence and the widest circulation and as it was becoming more and more the Government's banker and agent. The tendency to keep larger balances with the Bank grew as time went on, and when the widespread establishment of joint-stock banks in England began in 1826, the Bank of England had already come to be regarded as the custodian of the cash reserves of the private banks, and thus of the country's gold reserves This tradition of maintaining balances with the Bank was also taken up by the joint-stock banks, and its position as the centre of the English banking structure was further strengthened in 1854, when the plan was adopted of settling the differences between the various banks at the end of each clearing by transfers between their respective accounts at the Bank.

The next development was that the Bank came to accept the position of being the 'lender of last resort', as Bagehot called it, and to assume responsibility for endeavouring to maintain not only the currency but also the credit system of the country on a sound basis. The close relationship between currency and credit was forcibly brought to the Bank's attention by the crises of

1847, 1857 and 1866. It had under the Bank Act to maintain a minimum gold reserve against its note issue and to redeem its notes on demand in gold coin; and those crises clearly demonstrated the extent to which the position of the Bank could be affected by speculation and undue expansion of credit, and, accordingly, the need for taking steps in good time to protect its gold reserve. On the other hand, it was brought home to the Bank that in certain circumstances financial panic could easily be brought about by the fear that the requisite banking facilities could not be obtained, and that it could be promptly allayed by the assurance that all legitimate requirements would be met by the Bank, although at temporarily higher rates with the object of limiting the demand for accommodation to the most urgent and essential needs and securing the contraction of credit as a whole.

The use of Bank Rate as an important instrument of credit policy was now firmly established, and the Bank's regulatory function received greater prominence. The crisis of 1873 was promptly and successfully handled by the Bank; and similarly, in 1890, when a serious emergency was created by widespread and excessive speculation in foreign securities culminating in the failure of Baring Brothers, the Bank succeeded by prompt action in allaying public alarm and averting a general panic. In neither case was it necessary for the Government to suspend the gold-cover requirements of the Bank Act, which had to be resorted to in the crises of 1847, 1857 and 1866.

The successful application of its paternal influence in these emergency situations not only gave the Bank of England great prestige and established it finally as the central bank of Great Britain, but also stimulated the development of central banking in other parts of the world.

Development of Other Central Banks. In various countries, during the course of the nineteenth century, the State either endowed an existing bank with the sole or principal right of note issue, or caused a new bank of issue to be established with special powers and privileges, accompanied by varying degrees of State control and supervision.

The Riksbank of Sweden, which had sprung from a privately-owned bank founded in 1656 and reorganised as a State bank in 1668, followed in the footsteps of the Bank of England and gradually developed into a central bank. During a large part of its earlier career it enjoyed a monopoly of note issue which was reaffirmed by legislation in 1809, but the 'enskilda' banks which were estab-

lished from 1830 onwards took the liberty of issuing their own notes and later obtained legal authority for their issues. It was not until 1897 that the sole right of issue was finally restored to the Riksbank. Although a State-owned bank, whose Chairman was appointed by the King and whose six other directors were elected by the Legislature, it succeeded in acquiring a large measure of independence in matters of banking policy and administration as well as attaining a position of unquestioned leadership in the Swedish financial system.

The Bank of France, which was founded in 1800 partly with the aid of State funds but mainly with private capital, was closely connected with the State from the beginning. It became the Government's banker and received the exclusive right of note issue in Paris. The Government claimed a participation in the control of the Bank through the appointment of the Governor and two Sub-Governors, while the shareholders were represented by a board of fifteen Regents elected by the two hundred largest shareholders. In 1848 its scope and capital were enlarged as a result of the transformation of nine provincial banks with note-issuing powers into branches of the Bank of France In due course more branches were established and the Bank obtained a monopoly of note issue in the whole of France. In accordance with the intention of its founder, Napoleon Bonaparte, the Bank became 'national in its operations as well as in name', and like the Bank of England it became not only the banker of the State and the bank of issue, but also the custodian of bank reserves and the ultimate source of credit in an emergency.

The Bank of the Netherlands was established in 1814 after the old Bank of Amsterdam had for various reasons become discredited. The need was felt for a bank of the new type which was developing in England, Sweden and France, as referred to above. It was accordingly granted the sole right of note issue and made the Government's banker. It was founded with private capital, but the President and Secretary of the Managing Board were appointed by the Government, while the other members of the Managing Board and the Board of Directors were elected by the shareholders.

The National Bank of Austria was instituted in 1817 in order to restore order in the monetary position of Austria, which had seriously deteriorated as a result of the excessive issue and depreciation of Government paper money. The Bank received the exclusive privilege of note issue and proceeded to convert the Government money into its own notes as far as circumstances would permit.

This process was almost completed by the end of 1847, but owing to the wars and uprisings in which Austria was involved between 1847 and 1866 the Government again resorted to the issue of paper currency, and several loans had also to be made to the Government by the Bank. The Bank was reorganised as the Bank of Austria-Hungary in 1878, and subsequently steps were taken to retire the Government paper money and to place the monetary system on a sound basis.

The Bank of Norway, which was opened in 1817, was brought into being by private capital, but its Governor and Vice-Governor were appointed by the King and the directors were elected by the Legislature. It was accorded the sole right of issue and made the Government's banker, and its further development followed on much the same lines as the Riksbank of Sweden.

The National Bank of Copenhagen, now known as the National Bank of Denmark, was founded with private capital in 1818 to take over the business of the Rigsbank, a State bank which had been created in 1813 to withdraw the depreciated Government paper money from circulation and to issue bank notes in their place. The National Bank became the sole bank of issue and was called upon to reorganise the monetary system. The only State control was in the form of the appointment by the Government of two out of the four or five managers, while the Board of Directors was elected by the shareholders.

The National Bank of Belgium was created in 1850 as the sole bank of issue and the financial agent of the Government. Prior to that date there were four banks of issue, and the notes of none of these banks had a national circulation, nor did they operate successfully as agents of the Treasury. The National Bank was a privately-owned institution, but the Governor of the Bank was to be appointed by the Government.

The Bank of Spain, which had sprung from a State bank founded in 1829, was established under that name in 1856. At first it had to share the right of issue with the provincial banks, and was not granted a monopoly of note issue till 1873. Although the capital was raised by private subscription, the appointment of the Governor of the Bank rested with the Government.

The Bank of Russia was founded in 1860 as a State bank with the declared object of consolidating the monetary circulation and the floating debt of the Russian Empire. The country had suffered greatly from the evils of depreciated Government paper money and from the lack of proper banking facilities. The Bank was granted

the sole right to issue bank notes and was called upon to stabilise the currency and promote the development of commerce, industry and agriculture by means of short-term credits. The Governor and Deputy Governor were appointed by the Government, while a Council consisting of Treasury officials was instituted to supervise the operations of the Bank.

The Reichsbank of Germany was founded in 1875 on the Bank of Prussia, whose ownership rested partly with the State but mainly with private shareholders. At the time of the formation of the German Empire there were in the several German States thirty-three banks of issue, of which the Bank of Prussia was the most important. It was agreed that these banks should retain their right of issue subject to certain limitations and to a uniform set of regulations, but that there should be a central bank of issue which was also to act as banker to the Imperial Government and to pursue, like the Bank of England, a bank-rate policy for the protection of the gold reserve and the credit structure of Germany. The Bank of Prussia was taken as the nucleus of such a bank which was called the Reichsbank. The Prussian Government was paid out its share of the capital and surplus, and the whole of the capital of the Reichsbank was obtained by private subscription. The Imperial Government, however, reserved to itself the power of appointing the Management Board, while the shareholders were to be represented by a council elected by themselves.

The Bank of Japan was set up in 1882 to restore order out of the chaos caused by the excessive issues of notes by the several national banks. These banks were ordered to withdraw their notes within a certain period, and the Bank of Japan obtained the sole right of issue. It was a joint-stock company, but the whole directorate of the Bank consisting of the Governor, Deputy Governor and four directors were to be appointed by the Government. The Bank developed very much on the lines of the Reichsbank of Germany and the National Bank of Belgium.

In such countries as Portugal, Roumania, Bulgaria, Servia, Turkey, Java, Egypt and Algeria, banks with a monopoly of note issue were also brought into being during the nineteenth century.[1]

Thus, by the end of the nineteenth century almost every country

[1] In connection with this historical survey of the development of central banks, the author wishes to acknowledge his indebtedness, in particular, to the following works: Andréadès: *History of Bank of England*, Conant *History of Modern Banks of Issue*; Dunbar: *Theory and History of Banking*; Mackenzie: *Banking Systems of Great Britain, France, Germany, and the United States of America*, Willis and Beckhart: *Foreign Banking Systems*

in Europe, along with Japan, Java and Persia in the East, and Egypt and Algeria in Africa, had established a bank of issue with special privileges and powers. All these banks became the bankers and financial agents of the Governments of their respective countries; and in different ways or in varying degrees they also assumed the other functions which were developed by the Bank of England and which have come to be regarded as essential functions of 'central banks'.

As regards their relations with customers other than governments and banks, the range of business varied from that of the Bank of England, which by the end of the nineteenth century had already come to give up most of its commercial banking business and to deal mainly with operators in the money market, to that of the Bank of France, which had a large number of branches and conducted a large business with regular customers, including many small tradesmen all over the country; and in regard to their constitutional relationship with the State, the Bank of England again stood at the one end, a privately-owned[1] institution without any participation by the Government in its management and supervision, while at the other end was the Bank of Russia, a State-owned institution managed by Government nominees and supervised by Government officials.

Whatever the constitution and range of business, however, a series of traditions and practices were gradually being built up by experience and by a process of trial and error, and these formed the nucleus of the technique of central banking which was to witness great developments during the first four decades of the twentieth century.

Establishment of New Central Banks. At the beginning of the twentieth century all the countries of the New World, and such countries of the Old World as China and India, were still without central banks, and, in most cases, even without partial centralisation of the note issue. In the United States of America,[2] every bank established under the National Banking Act had the right to issue notes against deposit with the Federal Treasury of an equivalent amount of certain Government securities, and none of these banks acted exclusively as the banker or fiscal agent of the United States

[1] The Bank of England was, however, converted into a State-owned institution in March, 1946

[2] It deserves to be mentioned that the First Bank of the United States (1792-1812) and the Second Bank of the United States (1816-30) had been institutions resembling the central banking type in some ways, and that the failure to secure a renewal of the charter of the Second Bank had deferred central banking development in the United States for nearly eighty years.

Government or as a lender of last resort. A more or less similar state of affairs prevailed in South and Central America and in Canada, Australia, South Africa, New Zealand, &c.

The financial panic of 1907 drew so much attention to the glaring weaknesses of the decentralised banking system of the United States that a special commission was appointed and an exhaustive inquiry ordered into the monetary and banking systems of the older countries. The outcome of this was the establishment, in 1914, of a central banking system for the United States in the form of twelve Federal Reserve Banks, each having authority over a defined area, with a co-ordinating Federal Reserve Board at Washington. These banks were granted a partial monopoly of the note issue and became the fiscal agents of the Government, the banks of rediscount and reserve, and the lenders of last resort in their respective territories. While the constitution of these banks was different in several respects from that of the central banks of Europe and their powers more closely circumscribed by legislation, they performed practically the same functions and adopted the same practices.

Provision was made for State participation in the administration of the Federal Reserve System through the appointment of the members of the Federal Reserve Board by the President of the United States, and then through the appointment by the Federal Reserve Board of three out of the nine directors of each Federal Reserve Bank, including the chairman The other six directors were to be elected by those commercial banks which became members of the System in their respective districts, and while three of these could be bankers, the other three were to be representative of the commercial, industrial and agricultural interests of the community. Moreover, the member banks subscribed the whole capital of the Federal Reserve Banks and had to keep with the latter the minimum reserves against their deposit liabilities as laid down by law. Thus, the Federal Reserve Banks were more of the nature of a bankers' bank than any other central bank.

Although the Federal Reserve Banks of the United States were virtually superimposed upon an extensively developed banking structure, in contrast to the gradual development of central banks alongside commercial banks in the older countries, and were for that reason opposed and obstructed by certain sections of the community, they soon succeeded in working their way into the financial system of the United States and proved to be of great benefit and assistance to the Government and the banks during the war and

post-war period (1917-20). The comparative success of the Federal Reserve System, under the unfavourable conditions emanating from unit banking as opposed to branch banking and from the existence of banking laws in each of the forty-eight States in addition to the Federal banking laws, played an important part in focusing attention on the desirability of having a central banking system in any country.

Moreover, the International Financial Conference, which was held at Brussels in 1920, passed a resolution to the effect that all countries which had not yet established a Central Bank should proceed to do so as soon as possible, not only with a view to facilitating the restoration and maintenance of stability in their monetary and banking systems but also in the interest of world co-operation.

During the next thirty years, commencing with the establishment of the South African Reserve Bank in the beginning of 1921, there was great activity in the formation of central banks in all parts of the world, as illustrated in the following table

1921	South African Reserve Bank
1922	Reserve Bank of Peru (reconstituted as Central Reserve Bank of Peru in 1931)
	Bank of Latvia
	Bank of Lithuania
1923	Bank of the Republic of Colombia
1924	National Bank of Hungary
	Bank of Poland
	Bank of Danzig
	Commonwealth Bank of Australia and Bank of the Republic of Uruguay converted into central banks
1925	National Bank of Albania
1926	National Bank of Czechoslovakia
	Central Bank of Chile
	Central Bank of Guatemala (replaced by Bank of Guatemala in 1946)
1927	Central Bank of Ecuador
	Bank of Estonia converted into a central bank
1928	Central Bank of China
	National Bank of Persia (Iran)
	Central Bank of Bolivia
	Bank of Greece (in place of National Bank of Greece)
	National Bank of Iceland converted into a central bank
1931	Central Bank of the Turkish Republic
1932	Bank of Mexico converted into a central bank

1934	Reserve Bank of New Zealand
	Central Reserve Bank of Salvador
1935	Bank of Canada
"	Reserve Bank of India
	Central Bank of the Argentine Republic
1936	Bank of the Republic of Paraguay (reconstituted as Bank of Paraguay in 1944)
1937	National Bank of Costa Rica (replaced by Central Bank of Costa Rica in 1950)
1940	Central Bank of Venezuela
1941	National Bank of Afghanistan
	National Bank of Nicaragua converted into a central bank
1942	Central Bank of Ireland
	Bank of Thailand
	State Bank of Ethiopia
1945	National Bank of Poland
1947	Central Bank of the Dominican Republic
1948	State Bank of Pakistan
	Union Bank of Burma
	Central Bank of the Philippines
	National Bank of Cuba
1949	National Bank of Iraq
1950	Central Bank of Ceylon
	Central Bank of Honduras
1952	Central Bank of Belgian Congo
	Bank of Issue of Associated States of Indo China
1954	Bank of Israel

Present Position of Central Banking. At present, therefore, with the exception of Brazil (and certain colonial and mandated territories), there is no country in the Old or the New World which has not set up a central bank of its own. Moreover, Brazil[1] appears to have the establishment of a central bank under consideration. This state of affairs may be attributed to the growing realisation that under modern conditions of banking and commerce it is a great advantage to any country, irrespective of the

[1] The Bank of Brazil, in addition to its commercial banking business, does perform some central banking functions, such as holding deposits of the other banks and rediscounting for them, and acting as the Government's banker and agent, but it does not have the power of note issue, which is vested in the Treasury, and it cannot be looked upon as the 'lender of last resort' with the special responsibility towards the entire credit structure which this function implies In general, its commercial banking functions and duties predominate to such an extent that it cannot be classified as a central bank In February, 1945, the office of Superintendent of Currency and Credit was created in the Treasury 'with the immediate object of exercising control over the money market as a preliminary to the ultimate organisation of a central bank in Brazil'

stage of economic development, to have centralised cash reserves and the control of currency and credit vested in one bank which has the support of the State and is subject to some form of State supervision and participation, whether directly or indirectly. Another factor is the realisation that a central bank offers the best means of communication and co-operation between the banking system of one country and that of another.

While there are substantial differences in the constitutional structure and in the statutory powers of the various central banks, most of them show a tendency in practice to conform to, or work up to, an almost identical pattern in respect of their functions and methods. In the absence of uniform conditions, local improvisations and adjustments are, of course, resorted to in many cases. Thus, the methods vary in degree and sometimes in kind as between one central bank and another, depending upon the particular stage of economic development of a country; the volume and variety of its material resources; the make-up of its banking and credit structure generally; the nature of its international financial relationship (whether a creditor or a debtor country); the state of development of its capital market; and the degree of organisation and activity of its money market, i.e. whether it is a highly-developed and active money market with world-wide connections, as those of London and New York, or whether it is a subsidiary money market, as those of Paris, Berlin, Amsterdam, Stockholm and Zurich, or a relatively unorganised and inactive money market, as those of Australia, South Africa, New Zealand, Argentina, Mexico, Chile, &c. The point is, however, that underneath all these variations there lies a large measure of agreement in practice, and central bankers are to be found all over the world with more or less the same outlook on monetary and banking matters and the same regard for certain traditional conventions.

The methods of central banks also vary in kind and in degree as between one period and another, in accordance with the need for adjustment to fundamental changes in economic conditions and in the trend of political thought and action; and where some central banks are compelled by such circumstances to adjust their methods or adopt new ones, others faced with somewhat similar circumstances tend sooner or later to follow suit wholly or partly and directly or indirectly.

Central banking has become an entirely separate branch of banking, as distinct from the functions and operations of commercial banks, industrial banks, agricultural banks, savings banks

investment banks, &c. Central banks have developed their own code of rules and practices, which can be described as 'the art of central banking' but which, in a changing world, is still in the process of evolution and subject to periodical readjustment. It is now also legitimate to speak of 'the science of central banking'.

A clearly-defined concept has been evolved, a central bank being generally recognised as a bank which constitutes the apex of the monetary and banking structure of its country and which performs, as best it can in the national economic interest, the following functions:

1. The regulation of currency in accordance with the requirements of business and the general public, for which purpose it is granted either the sole right of note issue or at least a partial monopoly thereof.

2 The performance of general banking and agency services for the State.

3. The custody of the cash reserves of the commercial banks.

4. The custody and management of the nation's reserves of international currency.

5. The granting of accommodation, in the form of rediscounts or collateral advances, to commercial banks, bill brokers and dealers, or other financial institutions, and the general acceptance of the responsibility of lender of last resort.

6. The settlement of clearance balances between the banks; and

7. The control of credit in accordance with the needs of business and with a view to carrying out the broad monetary policy adopted by the State

A further requisite of a real central bank is that it should not, to any great extent, perform such banking transactions as accepting deposits from the general public and accommodating regular commercial customers with discounts or advances. It is now almost generally accepted that a central bank should conduct direct dealings with the public only in such forms and to such extent as, in the circumstances of the particular country, it considers absolutely necessary for the purpose of carrying out its monetary and banking policy. If a central bank has a large commercial banking business, such operations might come into direct conflict with its functions as the bankers' bank, the lender of last resort and the controller of credit. It has, for example, come to be recognised over a wide range of countries that the success of a central bank depends largely upon the whole-hearted support and co-operation of the commercial banks, and that such co-

operation can be effectively obtained only if it refrains from competing directly with them in their ordinary banking business, except when compelled to do so in the national economic interest.

While the older central banks perform the functions enumerated above mostly as the result of tradition, the newer central banks have had some of those functions specifically entrusted to them by statute. Preambles outlining general policy have even become fashionable. For example, in the preamble to the Bank of Canada Act that bank is directed 'to regulate credit and currency, to control and protect the external value of the national monetary unit and to mitigate by its influence fluctuations in the general level of production, trade, prices and employment so far as may be possible within the scope of monetary action'; and the preamble to the Reserve Bank of India Act refers to that bank as being constituted 'to regulate the issue of bank-notes and the keeping of reserves with a view to securing monetary stability in British India, and generally to operate the currency and credit system of the country to its advantage'.

Moreover, the statutes of many of the newer central banks circumscribe their powers and functions to such an extent that those statutes amount almost to a definition of what a central bank should or should not do The noticeable trend in central banking legislation towards a more or less standard type, after allowing for the political constitution and the stage of economic development of different countries, affords a practical illustration of the existence of a clearly-defined concept of central banking.

Characteristics of a Central Bank. The question as to which function more particularly characterises a bank as a central bank has exercised the minds of several economists. For example, Hawtrey[1] regards its function as the lender of last resort as the essential characteristic of a central bank and points out that, while the right of note issue gives a bank a great advantage in facing the responsibilities of the lender of last resort, it can nevertheless perform that function without the right of issue. Vera Smith,[2] on the other hand, says that 'the primary definition of central banking is a banking system in which a single bank has either a complete or a residuary monopoly in the note issue', and that 'it was out of monopolies in the note issue that were derived the secondary functions and characteristics of our modern central

[1] *Art of Central Banking*, p. 131

[2] *Rationale of Central Banking*, p 148.

banks', whereas Shaw[1] holds that, in order to have an automatic, self-regulating currency, the State should issue notes and use the central bank only for the distribution of the notes, if at all Shaw thinks that 'the one true, but at the same time all-sufficing function of a central bank is control of credit'

Kisch and Elkin[2] consider that 'the essential function of a central bank is the maintenance of the stability of the monetary standard', which 'involves the control of the monetary circulation', while Jauncey[3] says that 'clearing is the main operation of central banking'. In the Statutes of the Bank for International Settlements, on the other hand, a central bank is defined as 'the bank in any country to which has been entrusted the duty of regulating the volume of currency and credit in that country'.

Moreover, the fact that several central banks have been named reserve banks, namely, the Federal Reserve Banks of the United States, the South African Reserve Bank, the Central Reserve Bank of Peru, the Reserve Bank of New Zealand, and the Reserve Bank of India, appears to show that in the opinion of some authorities the custody of bank reserves is the characteristic function of a central bank.

In practice, however, it is difficult to single out any particular function as the characteristic one or name all the functions in the order of their importance, since they are interrelated and complementary. For example, a specific loan operation of a central bank (i.e. in its capacity as a bank of rediscount) might have been caused by a commercial bank requiring more note currency (involving the central bank as the bank of issue) or foreign exchange or gold (involving the central bank as the custodian of the nation's reserves), or having to replenish its cash reserves and clearing balances (involving the central bank as the custodian of the cash reserves of the commercial banks and the bank of central clearance) which it could not obtain from any other source owing to general monetary stringency (involving the central bank as lender of last resort); and before effecting the rediscount, the central bank might have raised its discount rate or imposed certain conditions in its capacity as the controller of credit.

A true central bank should always be ready to perform any of the functions enumerated above if the conditions and circum-

[1] *Theory and Principles of Central Banking*, pp. v and 78-80.
[2] *Central Banks* (Fourth Edition), p 74.
[3] *Australia's Government Bank*, p. 166.

stances in its area of operation render it necessary or desirable for it to do so. The guiding principle for a central bank, whatever function or group of functions it performs at any particular moment, is that it should act only in the public interest and without regard to profit as a primary consideration.

* * * *

The following seven chapters deal separately with the seven main functions of central banks, as there is a considerable advantage in also tracing the separate development of the various functions and as this is the only satisfactory way of setting out in detail the operations connected therewith. The essential unity and the interdependence of these functions under modern conditions must, however, be constantly borne in mind; and to facilitate this, the inter-connections between one function and another will off and on be brought out in each of those chapters. In the chapter on the Central Bank as the Controller of Credit attention will be drawn to the fact that it is through the function of credit control, in particular, that the other functions are united and made to serve a common purpose.

The same considerations apply to the five chapters devoted to a separate analysis of the development of the various methods of credit control.

CHAPTER II

THE CENTRAL BANK AS BANK OF ISSUE

Evolution of Issue Function. The privilege of note issue was almost everywhere associated with the origin and development of central banks. In fact, until the beginning of the twentieth century they were generally known as banks of issue.

The issue of notes as of other currency was always claimed to be a prerogative of the State, but whereas in the case of metallic currency the State retained its prerogative, it decided, with few exceptions, to hand the issue of notes over to banks when they, like note currency itself, arose and developed out of the need for further means of facilitating the exchange of goods. Banks were given the right to issue notes, or, where banks had already put into circulation notes of their own in one form or another, they were legally authorised to continue issuing notes, subject to certain safeguards imposed by law. In some countries the note issue was entrusted to banks owing to the heavy depreciation of, and the consequent loss of public confidence in, notes issued by the State, while in others it was done in return for loans to the State or because the issue of notes was considered more appropriate in the hands of banks than those of the State.

In due course, as more banks came to be established in each country and note currency came into greater use with the rapid expansion of trade, the need for uniformity in the note circulation and for better regulation of the note issue caused almost every country to introduce specific legislation granting one bank either a complete monopoly of the note issue or a residuary monopoly, as Vera Smith[1] calls it. This stage was reached, for example, in Holland in 1814, England in 1844, France in 1848, Germany in 1875, Sweden in 1897, United States in 1914, Union of South Africa in 1921, Colombia in 1923, Australia in 1924, Chile in 1925, Italy in 1926, New Zealand in 1934, Canada in 1935,

[1] *Rationale of Central Banking*, p. 148. 'A residuary monopoly denotes a case where there are a number of note issuers, but all of these except one are working under narrow limitations, and this one authority is responsible for the bulk of the circulation '

Venezuela in 1940, and Ireland in 1942. In some cases, as in England and Sweden, the bank which was ultimately granted the monopoly of the note issue was also the first joint-stock bank to be established in those countries, but in many countries it was given to a new bank which was created under a special law or charter for the purpose, *inter alia*, of securing uniformity in the note issue In all cases, however, the banks entrusted with the sole or residuary monopoly of note issue are to-day the recognised central banks of their respective countries; and this monopoly privilege was a primary factor in their development into central banks with special duties and responsibilities of a semi-public character.

In the case of most of the central banks which to-day enjoy a complete monopoly of the note issue, the other banks were required by law to redeem their notes as they were paid in or to withdraw their notes from circulation within a stated period, as in Sweden, Switzerland, Union of South Africa, Colombia, Chile and New Zealand; or the central bank was required to take over the issues of the other banks subject to certain conditions and provisions for their redemption, as in France, Spain, Japan and Italy In England the other banks were allowed under the Act of 1844 to retain their note issues, but they were limited to the individual amounts outstanding at that time and provision was made for their lapsing in certain circumstances, the final extinction taking place in 1920; in Germany, where thirty-three note-issuing banks were in existence on the establishment of the Reichsbank in 1875, all but four had, owing to the restrictions imposed on their issues, surrendered their right of issue to the Reichsbank long before 1935 when the privilege of the remaining four was withdrawn; and in Canada, where the chartered banks were permitted to continue issuing notes after the establishment of the Bank of Canada in 1935, subject to their note issues being gradually reduced in accordance with a prescribed schedule to 25 per cent. of their unimpaired paid-up capital, the Bank of Canada was subsequently given the sole right to issue notes as from 1st January, 1945.

There are, at present, only a few central banks which do not yet enjoy a complete monopoly of the note issue. Those of the United States have, at least, a residuary monopoly. In the United States, the issues of the national banks were limited to the outstanding amounts of the special Government bonds carrying the privilege of cover for such notes, and these are being gradually

redeemed. There are, moreover, limited amounts of Government notes in circulation, namely, the old 'Greenbacks' of the Civil War, the Treasury notes of 1890 and silver certificates secured by silver coin or bullion in the Federal Treasury. The Federal Reserve notes now represent the great bulk and the elastic element of the note circulation,[1] and for practical purposes the Federal Reserve System may be said to have a monopoly of the note issue.

Thus, while in theory the function of note issue may, according to the analysis of Hawtrey,[2] not be essential to the satisfactory performance of other central banking functions, in practice it has come to be regarded as such an important feature of the central banking structure that every central bank in the world has been given either the sole or the principal right of note issue in its particular territory.

Concentration of Note Issues in Central Banks. The main reasons for the concentration of the note issue of almost every country in a central bank are the following:

(1) Every country found it necessary or desirable not only to bring about uniformity in its note circulation according as notes became more and more the principal form of hand-to-hand currency, but also to attain effective State supervision over a credit instrument which had, for the sake of convenience, to be declared by law to be legal-tender money Although this uniformity and State supervision could also have been achieved by means of a direct State issue, the many examples of depreciation of Government notes in the past and the consequent public distrust of Government issues caused the State to concentrate the note issue in one bank, even if it was in some cases a State bank. In other words, the Governments considered it advisable in the circumstances to exercise their supervision over the note circulation indirectly through a central bank governed by special legislation, rather than directly through a Government Department.

(2) With the increasing use of deposit money created by the commercial banks and the growing need for some form of credit control by a central bank, it came to be more generally realised that a monopoly of the note issue in itself tends to give a central bank some measure of control over undue credit expansion by the

[1] At the end of 1952, only $75,000,000 in notes of the national banks and $2,420,000,000 in Government notes were in circulation, compared with $25,941,000,000 in Federal Reserve notes and $210,000,000 in Federal Reserve Bank notes The Federal Reserve Bank notes are secured only by obligations of the United States Government and are in process of retirement.

[2] Op. cit., p. 131.

commercial banks, since the expansion of credit obviously leads to an increased demand for note currency. Except in special circumstances, such as when net favourable balances of payments over a period of years or other factors have provided the commercial banks with large credit balances at the central bank (which will be discussed in subsequent chapters), the commercial banks must sooner or later borrow from the central bank in order to obtain the additional supply of notes required for the larger payments of wages and salaries arising out of their credit expansion and the consequent increased economic activity, since they cannot issue notes themselves. In the absence of special circumstances, therefore, the sole right of note issue tends at least to give the central bank a better opportunity of exercising such influence over credit expansion by commercial banks as it considers to be appropriate under the prevailing conditions.

(3) It also came to be recognised that the concentration of the note issue in one bank which, moreover, enjoys the support of the State, gives such notes a distinctive prestige not attaching to notes issued by several banks—a prestige which has proved to be of great value in a crisis or other emergency.[1]

(4) Since the issue of notes could in certain circumstances be a valuable source of profit and since Governments preferred for various reasons not to issue notes themselves, it appeared to be more advantageous to concentrate the note issue in one bank and provide for participation in its profits than to leave the right of issue in the hands of several banks, even if they were subject to tax on the amount of their notes in circulation Details of the provisions for State participation in the profits of central banks will be given in Chapter XVIII.

Regulation of Note Issues. Apart from uniformity, it is important to have elasticity in the note issue with a view to meeting the legitimate currency requirements of business and the general public. The note circulation should operate automatically and be capable of expanding according as the demand for currency increases (whether as the result of expanding business activity and larger pay-rolls or seasonal factors such as during harvesting and holiday periods), and of contracting according as the demand for currency declines because of contraction of business and smaller pay-rolls or seasonal dullness. Willis,[2] for example, refers to the 'recognised principle of bank-note circulation' as 'dictating that

[1] Dunbar, *Theory and History of Banking* (Third Edition), pp 79-80
[2] *Theory and Practice of Central Banking* (Harper), p 264

the issue of notes shall take place when and as demanded by those who have business transactions to perform, or wages to pay'.

The question as to how far elasticity in the note circulation could be carried without unduly weakening the security of the notes and shaking public confidence, or facilitating the creation of unsound economic conditions, was the subject of controversy for over a hundred years. During that period there were, roughly speaking, five different methods evolved by legislators in connection with the regulation of note issues.

The first is the system of a partial fiduciary issue, which was introduced in England in 1844 and subsequently adopted by several countries The primary feature of this system is that of a fixed amount laid down by law, which need be covered only by Government securities, while all notes issued in excess of this amount must be fully covered by gold This method of note regulation was frequently criticised in England as being too inelastic, on the ground that an internal or external drain of gold caused an undue contraction of currency and credit, and also that it was not sufficiently adaptable to heavy demands for currency in financial panics and other emergencies On the other hand, the view was held that it served at least a useful purpose as a brake on undue expansion of currency and credit in times of prosperity. In spite of the frequent attacks on the relatively inelastic English system of note issue, even by Governmental Commissions of enquiry, it continued to remain in force, mainly, it appears, as a matter of tradition.

It was not until 1928 that elasticity in the note issue of England was specially provided for in the form of legal authority to the Treasury to permit the Bank of England to increase its fiduciary issue above £260,000,000 (the amount fixed at that time), to a specified amount for not more than two years altogether from the date on which the authority was originally given.[1] The fiduciary issue was increased, for the first time, by £15,000,000 to £275,000,000 in August, 1931, in order to protect the credit base from the drain of gold which was then taking place. This increase was interpreted in a very unfavourable light on the Continent, since it was regarded as the beginning of inflationary tendencies, and it helped to increase the outflow of gold. The disadvantage of this expedient is, as the *Statist* pointed out at the time, that

[1] Any further renewal after two years, therefore, required the specific sanction of Parliament. During the war this provision was suspended by emergency powers, and subsequently for the duration of the Emergency Powers (Defence) Act

'elasticity can only be obtained at the cost of a definite loss of confidence', inasmuch as it 'attracts unnecessary attention when that attention is least desirable'. The Macmillan Committee[1] on Finance and Industry had also in the same year stated that 'an approach by the Bank of England to the Treasury for permission to increase the fiduciary issue would be interpreted as a sign of weakness, and be the occasion of nervousness at a time when the opposite effect on sentiment was to be desired'.

Subsequently, however, greater use was made of this expedient. In March, 1933, the fiduciary issue was reduced to the original figure of £260,000,000 owing to the inflow of gold at that time; and in December, 1936, it was further reduced to £200,000,000 to compensate for the sale of gold to the Bank of England by the Exchange Equalisation Account. In November, 1937, it was raised to £220,000,000 in order to protect the reserve against heavy seasonal expansion in the note circulation due to Christmas demands, and reduced again to £200,000,000 in January, 1938, when the note circulation declined. In December, 1938, it was increased to £230,000,000 for the same reason as in the preceding year, and early in January, 1939, it was further increased to £400,000,000 in order to facilitate the transfer of £200,000,000 gold (at the statutory price of about eighty-five shillings per fine ounce) from the Bank of England to the Exchange Equalisation Account. In the following month, however, it was reduced to £300,000,000 as a result of revaluation of the remainder of the Bank's gold holdings at current market price It was then raised to £580,000,000 in September, 1939, when all the gold held in the issue department of the Bank, and valued at about £280,000,000 at the market price, was transferred to the Exchange Account with the object of 'concentrating the country's resources in one reserve'; and, finally, in order to provide for the continuous expansion of the note issue under war conditions, it was increased to £630,000,000 in June, 1940, to £950,000,000 by December, 1942, and to £1,400,000,000 by December, 1945. By the end of 1953 the amount had been further increased to £1,675,000,000.

Thus, the position since September, 1939, has been that England has abandoned the system of a partial fiduciary issue, and that the note issue of the Bank of England is now directly covered[2] only

[1] Page 140 of Report

[2] It should be borne in mind, however, that whatever gold and foreign exchange reserves Great Britain possesses are now concentrated in the Exchange Equalisation Account instead of in the Bank of England, and that such reserves are available for external purposes The implications of this will be dealt with in the discussion of gold and exchange reserves in Chapter V.

by Government securities and a trifling amount of gold and silver coin (about £1,500,000).

The former English system of a partial fiduciary issue was, with some variations, also followed by Italy prior to 1926, and by Japan, Sweden, Norway and Finland until the 'forties.

The second method is that followed by France between 1870 and 1928, and by England and Japan since 1939 and 1941 respectively, namely, that of a maximum limit for the note circulation in the form of an amount fixed from time to time and without any gold cover being prescribed by law. The essential difference between the system previously followed by France and that in force in England and Japan during the war and post-war periods, is that in the latter countries the Legislature delegated to the Treasury the power to raise the maximum limit at any time and to any amount during the period covered by specific authority or general emergency powers, whereas in the former the Legislature retained that prerogative. France abandoned its method of a maximum issue fixed by the Legislature because, according to Lemoine,[1] it 'was altogether too rigid and incapable of sufficient adjustment to the requirements of the present-day money markets', and also because it 'provides no guaranty against inflation' owing to the possibility of 'raising the limit by Parliamentary action whether such action is warranted or not'. The system of a flexible maximum note issue, under the control of the Treasury only and without any statutory requirement of a minimum reserve of gold or foreign exchange,[2] does provide for a high degree of elasticity in the note circulation, but it also lends itself to facilitating inflation and attaining elasticity at the risk of monetary instability. In this connection it is interesting to note that in England the control by Parliament over the maximum limit for the note issue was restored in February, 1954, when the normal limit was fixed at £1,575,000,000.

The third method was that formerly used in the United States in the case of the national bank notes, which had to be fully covered by certain Government bonds carrying the privilege of note cover and were limited to the outstanding amount of those bonds as well as to the paid-up capital of the banks. This system was found to be very unsatisfactory on account of its rigidity. It

[1] *Foreign Banking Systems*, edited by Willis and Beckhart, p 533.

[2] In this connection, it is interesting to note that the Macmillan Committee had recommended (in 1930) that the note issue of the Bank of England should be made subject only to a maximum which was fixed by law, but which could be temporarily suspended with the permission of the Treasury (p 142 of Report)

was, as Burgess[1] said, a safe currency but 'so fixed that it could neither readily be decreased in slack seasons and dull years, nor increased in busy seasons and periods of emergency'; and according to Kemmerer,[2] any elasticity possessed by national bank notes was of a chewing-gum variety. It was also employed for a time in certain other countries, for example, the Colony of the Cape of Good Hope in South Africa, where the notes had to be fully covered by Government securities and, in addition, limited to the paid-up capital and reserves of the issuing banks.

The fourth method is that of prescribing a minimum percentage gold reserve against the note issue, the remainder of the notes to be covered by certain specified assets such as trade bills and Government securities, and, in most cases, also a minimum gold reserve against the deposits of the central bank. This method of note regulation, which also provided formally for temporary suspension of the full reserve requirements subject to certain conditions, had by 1928 spread over a large part of the world and was further adopted by almost all the new central banks which were established after that date. In some countries, however, the central banks were allowed to include foreign exchange along with gold in the legal minimum reserve against notes and deposits, or a limited amount of silver in the reserve against deposits, while under the stress of the great depression of 1930-33, and subsequently under war conditions, many of the countries concerned were compelled indefinitely to suspend the reserve provisions or repeal the penal conditions attached to temporary suspension, or at least to reduce the minimum reserve.

The evolution of this system of note regulation, which represented a deliberate attempt to attain the highest degree of elasticity compatible with adequate security in the note circulation, reveals several points of interest in monetary theory and practice. When it was first introduced in Germany with the establishment of the Reichsbank in 1875, it provided for a minimum cash reserve of one-third of the notes in circulation, but a further limit was imposed on the note issue in that beyond a certain fixed amount the notes were to be fully covered by cash in hand (i.e. gold bullion, German or foreign gold coin, and other German coin). This additional limit showed the influence of the former English system, but a novel feature was added to it, namely, that the

[1] *Reserve Banks and the Money Market*, Revised Edition (Harper), p 73

[2] *Seasonal Variation in the Relative Demand for Money and Capital in the United States*, p 153

Reichsbank could issue notes in excess of this limit subject to the payment of a tax at the rate of 5 per cent. per annum on any such excess of notes The idea behind this method was to impart elasticity to the note circulation at the very point where the former English system was deficient in elasticity, while at the same time it discouraged the central bank from following a policy of undue expansion by imposing a tax on the uncovered excess In other words, by taking away the profit incentive it helped to ensure that currency expansion beyond the legally covered limit would take place only in emergencies or at the seasonal peaks of trade It served its purpose relatively well, but owing to the rapid economic development of the German Empire the tax provision came into effect too frequently, and the fixed amount had to be raised on several occasions.

Another novel feature in the German system was the provision that, apart from the minimum cash reserve of one-third, the remainder of the notes were to be covered by discounted paper having a maturity of not more than three months.

When the United States finally decided in 1913 to establish a central banking system, these new principles were incorporated in the provisions for the regulation of the note issues of the Federal Reserve Banks, but with various modifications and improvements. The idea of a fixed amount beyond which notes were to be fully covered by gold or other cash was discarded. Instead it was provided that the Federal Reserve Banks should maintain a minimum gold reserve of 40 per cent. against all their notes in circulation,[1] and that they should also hold a reserve of 35 per cent. against their deposits.[2] At first, in addition to the minimum gold reserve of 40 per cent. the notes were to be fully covered by trade or agricultural bills discounted for the member banks by the Federal Reserve Banks. This was prompted by the desire for a so-called 'pure asset currency', which would not only be

[1] The Federal Reserve notes were also declared to be obligations of the United States, and the issue of such notes by the Federal Reserve Banks was placed under the control of the Government-appointed Federal Reserve Board, who exercised their control through a Federal Reserve Agent attached to each Federal Reserve Bank The Federal Reserve Banks had to apply to the respective Federal Reserve Agents from time to time for such notes as were required by them for issue to the public, and to deposit with them the gold and other collateral security prescribed by law as the minimum cover against the Federal Reserve note issues

[2] The reserve against deposits could consist not only of gold bullion and gold coin but also other 'lawful money' (i e silver coin, silver certificates, 'Greenback' notes and national bank notes). In 1945, however, when the minimum reserve against both notes and deposits was reduced to 25 per cent., it was laid down that the reserve against deposits, as in the case of notes, was to consist only of gold, i e gold certificates in present circumstances.

a very safe and sound currency but would also expand or contract in accordance with the volume of business, as it was expected that the volume of discounted bills in the hands of the Federal Reserve Banks would reflect fairly accurately the volume of business activity in the United States. This was, however, found not to be the case, and the Federal Reserve Banks experienced difficulty at times in providing adequate note currency.

The next step was taken in 1916, when the base of the note issue was broadened by admitting as cover the short-term collateral notes of the member banks which represented another means of member-bank borrowing from the Federal Reserve Banks, and also the bills and acceptances bought by the latter in the open market, while in 1917 gold was admitted as direct cover and only for the remainder were notes to be covered by bills and collateral notes. Finally, in 1932 direct obligations of the United States were temporarily[1] admitted as additional backing for Federal Reserve notes, owing to the heavy demand for currency for domestic hoarding and the demand for gold from abroad at that time. In these ways the currency base was considerably broadened with a view to securing adequate elasticity.

The other elastic provision of the German system was adopted in the form of permitting, in an emergency, a temporary shortfall in the gold reserve against notes below the legal minimum rather than a temporary excess amount of notes above the amount covered in accordance with the reserve requirements. Provision was made for authority to suspend the full reserve requirements for thirty days and to renew the suspension for periods of fifteen days each, subject to the payment by the Federal Reserve Banks of a graduated percentage tax on the amount of the shortfall in the gold reserves and to the raising of their discount and interest rates at least by the percentage of the tax to be so paid.

The basic provisions of the Federal Reserve Act of the United States (as amended up to 1917), relating to the regulation of the note issue and to the reserve against deposits as well as notes, were incorporated in the statutes of most of the many new central banks which were established thereafter, and were also adopted by Italy in 1926 and France in 1928 when they reorganised their currency systems. Even Germany decided, on the occasion of the reorganisation of the Reichsbank in 1924, to adopt the modi-

[1] The provision declaring the Federal Reserve Banks' own holdings of Government securities (in contrast to those held under collateral notes) to be eligible collateral for Federal Reserve notes, was extended from time to time until the question of a time limit was finally eliminated in 1945

fications previously introduced by the United States, with the exception of the reserve against deposits, and in 1933, after the Reichsbank had lost most of its gold and exchange reserves owing to the flight of capital, it was also empowered, as was done in the case of the Federal Reserve Banks in 1932, to use its own holdings of Government bonds in addition to commercial bills discounted, as cover for notes.[1]

The fifth method is the one which was in use in Holland for many years and in the Union of South Africa since 1930, and which differs essentially from the fourth method only in one respect, namely, that it prescribes merely a minimum percentage gold reserve against notes and deposits and makes the notes a first charge on all the assets of the central bank. Thus, by discarding the principle of specifying the particular kinds of assets which may be used as cover for that part of the note issue not covered by gold, the central bank was given greater freedom of action.

This change was made, in the case of the note issue of the South African Reserve Bank, because such a restriction was found to be burdensome at times when there was a big demand for currency, and when the earning assets of the central bank happened to consist mainly of a type or types different from those specified in the law as eligible security against notes. It was realised that the central bank's holdings of trade and other bills did not, as was originally assumed, accurately reflect the state of economic activity and the currency requirements of business and the general public. The widespread adoption of the principle of a minimum gold reserve against the deposits as well as the notes of the central bank was already a belated legal recognition of the fact that, apart from the notes being a first charge on assets, the deposits represented no less a liability of the central bank than its notes did, since the former were convertible into the latter on demand; and thus it was only logical not to prescribe any specific security for the note issue other than a minimum cover of gold or of gold and foreign exchange, as was done in the case of deposits. This change, together with a provision for temporary suspension of the full reserve requirements subject only to the consent of the Treasury (as is now the case with the South African Reserve Bank), represents just another stage in the evolution of note regulation in the direction of the maximum elasticity and self-regulation compatible with adequate security for the monetary structure as a whole.

[1] By 1939 the Reichsbank was also authorised to use, as collateral against notes, certain other fixed-interest securities, Treasury bills, collateral loans and cheques in course of collection

Finally, under the stress of circumstances several countries indefinitely suspended or abolished reserve requirements, without laying down any maximum for the note issues of their central banks, namely, Germany, Italy, Greece, Peru and Bolivia during the 'thirties; France, Canada, Denmark, Norway, Holland and Belgium during the war; and, subsequently, Australia, Sweden, Czechoslovakia, Argentina, Chile and New Zealand.

State Notes versus Bank Notes. While the State has practically everywhere entrusted the note issue to a central bank, and while this is generally accepted as proof in itself that the central bank has been found by experience to be the most suitable and appropriate medium for the issue of note currency, there are still some adherents of the view that in the interest of the community the State alone should issue notes. Shaw[1] even expounded the view that a State note issue based on full value was the only means of securing an 'uncontrolled, automatic, self-regulating note currency', and that the State should use the central bank, if at all, only for the distribution of notes as in the case of metallic currency.

The following quotations will suffice to illustrate Shaw's reasoning:

'The principles of the true or ideal paper money, viz. a State-issued paper money of full face value, guaranteed by a full cover redemption fund composed of securities, issued automatically, retired automatically, self-regulating, never redundant, never deficient, neutral in its effect on prices, but rising equal to any strain upon it, guaranteed against debasement by the State which issues it, and incapable of debasement by the community which purchases and uses it'; 'so long as a State sells paper money at a full face value the public will only buy so much as it absolutely needs, and so much as it actually can afford to pay for'; and 'every known case of deliberate depreciation of currency has been the act of a needy Government which has imposed its will upon a Central Bank.'

It is difficult to understand why a needy Government should not hesitate to bring pressure to bear on the central bank to debase the note currency, but would refrain from debasing notes when it was the issuer itself, just because it had originally undertaken to issue full value currency and only in response to actual demand from the public. 'Necessity knows no law', and, moreover, history reveals many illustrations of currency depreciation owing to the over-issue of notes by the State.

It is true that there are also many examples of currency depre-

[1] *Theory and Principles of Central Banking*, pp 30-80

ciation due to needy Governments imposing their will upon central banks, but if the latter had resisted indefinitely the former would have resorted to other means of achieving their object. In this as in other matters, central banks are frequently confronted with the necessity of choosing the lesser of two evils. The resistance which is usually offered by a central bank against unsound monetary and financial policies on the part of the State is at least one advantage in favour of the central bank being the issuer of notes.

It is also difficult to understand why a State issue should be the only, or the best, medium of securing an automatic, self-regulating note currency. At least in every country where bank deposits constitute a more important means of payment than note currency, the issue of notes by the central bank is not a controlled factor in the sense that conscious and deliberate policy is imparted to it. Conscious policy, if any, is directed towards the control of credit, and the issue of notes proceeds automatically, contracting and expanding, as Shaw demands of an ideal paper currency, in accordance with the needs of business and the general public. In other words, the central bank does not take the initiative in the issue of notes. In the modern credit economy the creation of credit, either central bank or commercial bank credit, reveals itself in the first instance in the form of deposit money, while the secondary effect is an expansion of the automatic demand for notes. Thus, if depreciation of currency does not take place in countries where the central bank is the sole issuer of notes, it is to be attributed to the inflation of credit rather than of the note circulation. It is for this reason that many countries imposed a minimum reserve against both the notes and the deposits of their central banks.

Furthermore, since it is generally recognised, even by Shaw, that the control of credit belongs essentially to the central bank, and since the concentration of the note issue in the central bank has proved to be of great advantage in the carrying out of its function of controlling credit, it follows that the two functions should continue to be co-ordinated and to be exercised by the central bank subject to the general supervision of the State, rather than directly by the State.

Economic opinion in general is definitely against a State note issue, on account of the temptation in which Governments are placed and the comparative ease with which Governments as big disbursers of money can in the long run force their notes into circulation. As Lewinski[1] points out, 'bank-notes are, with rare

[1] *Money, Credit and Prices*, p. 55

exceptions, issued but on the demand of the recipient parties', whereas Goverment paper money can be 'put into the channels of circulation in exchange for services and goods' and need not be 'preceded by any demand for them'.

There are, moreover, no central bank notes which do not comply with Shaw's requirement of 'paper money of full face value, guaranteed by a full cover redemption fund composed of securities'. Whether specific collateral against notes issued by the central bank is prescribed by law or not, all central bank notes are fully backed by such assets as gold, foreign exchange, coin, trade bills, Treasury bills, Government bonds or other securities. In short, central banks only issue notes in exchange for value, although it must be admitted that the different kinds of assets which may be, or in certain circumstances have to be, accepted by a central bank in exchange for its notes are not all of equal value in the long run as a backing for the currency This aspect of the matter will be further discussed in Chapter V.

Automatic Issue of Notes by Central Banks. It is true that references are made at times in writings and discussions to the control of note currency by central banks. In central banking practice, however, notes are issued only as they are required and drawn by commercial banks on behalf of their customers for pay-rolls and holiday or other disbursements, or by the Government for payments of salaries and wages or for other purposes, and notes are returned to the central bank by commercial banks according as their customers deposit notes in excess of their normal requirements, or by the Government according as taxes or other forms of revenue are paid in the form of notes.

The weekly statements of all central banks show clearly how the fluctuations and trends of the note circulation depend upon the days of the week or month or the months of the year or the stages of a business cycle which are involved. In the stage of prosperity, for example, while the general trend of the note circulation will be upward, there will be substantial fluctuations during the course of any month or year.

Phenomenal World-Wide Increase in Note Circulation. Between 1914 and 1929 a considerable expansion of note issues was brought about by the general increase in the volume of money consequent upon the repercussions of World War I, and by the world-wide displacement of gold coin with notes on account of the abandonment of the gold-specie standard and the withdrawal of gold coin from circulation. Since the general suspension of the gold

standard, and more particularly since the outbreak of war in 1939, there has been a phenomenal increase in the note circulation of all kinds of countries, as illustrated by the following table:

NOTES IN CIRCULATION[1] AT END OF YEAR
(Base 1929 = 100)

Country	1929	1938	1944	1950	1952
United States	100	179	885	960	1,048
United Kingdom	100	135	314	345	387
Germany	100	148	967	—	—
France	100	160	845	2,303	3,133
Canada	100	144	572	731	835
Australia	100	117	486	648	814
South Africa	100	211	667	844	1,022
Sweden	100	186	438	617	804
Switzerland	100	175	355	467	513
Argentina	100	90	189	1,063	1,524
Chile	100	226	738	2,002	3,633

It will be observed that between 1929 and 1938 a considerable increase in the note circulation of most countries had already taken place. There was, firstly, a large increase in the volume of money generally (i.e. including bank deposits payable on demand), which was caused primarily by the expansion of central bank and commercial bank credit in response to an official policy of cheap money and expansion and/or as the natural outcome of currency depreciation, revaluation of gold reserves and increase in economic activity, and/or by a net favourable balance of payments during that period. To the extent that an increase in bank deposits is associated with increased activity, an expansion in the use of and demand for note currency is naturally to be expected; but with a greater abundance of money there is also a tendency for commercial banks and other financial institutions, as well as business concerns and the general public, to hold notes in proportionately larger average amounts than are actually required by them. Moreover, in some countries there was already evidence before the war of an increased use of currency relative to the use of cheques. In a study of currency and deposits in the United States,

[1] I.e. note issues of central banks, plus State and commercial bank notes still in circulation

Whittlesey points out that the increased use of currency has been going on for a quarter of a century, and that this 'is less a symptom of reversion to more primitive financial methods than an indication of certain shifts in the distribution of income and in methods of conducting trade'[1].

During the war all these factors operated, of course, to a much greater extent and with much greater force than in the years preceding the war. The basic factor in the belligerent countries was the enormous war expenditure, part of which had to be financed directly or indirectly by the creation of bank credit. The volume of money was considerably increased from time to time, not only to meet the actual requirements of a war economy and a rising price level, but also to maintain cheap money In addition, a relative increase in the use of notes was induced by war conditions, e g. larger holdings of currency by the banks, the business community and the public for emergency purposes, heavy cash payments to the armed forces and their dependants; 'the growth in wage payments relative to the increase in other income shares'[2] (owing to increases in wage rates, working hours and number of workers employed); the increased use of currency for purposes of 'black market' dealings and evasion of taxation, etc.

With regard to the neutral countries and others not actively or directly involved in the war, the increase in the note circulation during the war was to be attributed mainly to a substantial rise in the price level, increased expenditure on defence and expansion of economic activity, as well as to the effects on the volume of money of favourable balances of payments which resulted from war conditions.

After the war a further increase took place in the note circulation of all kinds of countries, as shown in the foregoing table. This was due not only to the expansion of production and trade, but also to the continued inflation of credit and prices, particularly in such countries as France, Argentina and Chile.

[1] *The Effect of War on Currency and Deposits* (National Bureau of Economic Research), p 4

[2] Ibid., p 24

CHAPTER III

THE CENTRAL BANK AS THE GOVERNMENT'S BANKER, AGENT AND ADVISER

Introduction. Central banks everywhere fulfil the functions of banker, agent and adviser of the Government. In fact, the older institutions performed these functions even before they developed into real central banks; and it was as banks with the sole or principal right of note issue that they came to be the bankers of their respective Governments. This association of the function of note issue with that of banker to the Government was thus automatically accepted in the case of the new central banks.

As the Government's banker the central bank conducts the banking accounts of Government departments, boards and enterprises; it makes temporary advances to the Government in anticipation of the collection of taxes or the raising of loans from the public, and extraordinary advances during a depression, war or other emergency; and it carries out the Government's transactions involving purchases or sales of foreign currencies. The central bank is also called upon to perform various services as the Government's financial agent, and it acts generally as a financial adviser of the Government.

Government Banking Accounts. In keeping the banking accounts of Government[1] departments and institutions, the central bank performs the same functions as the commercial bank ordinarily performs for its customers. It accepts their deposits[2] of cash, cheques or drafts, and undertakes the collection of the cheques and drafts drawn on other banks; it supplies them with the cash required for salaries and wages and other cash disbursements and also debits their accounts with the amounts of cheques or vouchers drawn by them on it and presented for payment by other customers; it transfers funds for the Government from one account

[1] In many countries the central bank keeps the accounts not only of the Central or Federal Government, but also of the Provinces or States.

[2] In the United States the Federal Treasury has continued to hold a substantial amount of actual cash and also to keep some of its deposits with commercial banks, whether arising out of the proceeds of issues of Government securities or out of deposits of current receipts in places distant from Reserve Bank cities.

to another or from one centre to another, etc.

The control over the Government accounts is usually centralised in the Treasury, except in the case of State enterprises or boards which are managed independently of the Treasury and which, therefore, make their own arrangements with the central bank.

Owing to the magnitude of the Government's financial operations, the keeping of the Government banking accounts obviously entails an enormous amount of clerical work and expense. In the case of many central banks, the State has provided for remuneration either directly in the form of a specific payment to the central bank based on the turnover of the accounts or an agreed annual amount, or indirectly through an arrangement whereby the Government has to maintain a minimum credit balance in its accounts with the central bank, even if it has to borrow from the latter at times in order to maintain the requisite balance In other cases, however, the central bank has under its charter or statute, or under a private agreement with the Government, to conduct the Government accounts free of charge; and as with permanent loans to the State in the case of the older central banks, this obligation on the part of the central bank is usually associated with its enjoyment of the privilege of note issue and any other privileges which may have been conferred by legislation

The central bank operates as the Government's banker, not only because it is more convenient and economical to the Government, but also because of the intimate connection between public finance and monetary affairs The State is in every country the largest receiver of revenue and has in most countries also become the biggest borrower; and its expenditures have come to play an increasingly important part in the economic life of the nation. The central bank, on the other hand, is charged with the duty and responsibility of controlling or adjusting credit in the national economic interest and carrying out the monetary policy adopted by the Government. As the manifold financial activities of the State can in certain circumstances exercise a disturbing influence on money-market conditions[1] and exchange rates and counteract the credit policy of the central bank, the centralisation of Govern-

[1] In this connection the view is held in some circles that, to prevent immobilisation of banking funds resulting from large Government balances with the central bank at certain times, Government deposits should be kept with the commercial banks rather than the central bank Such immobilisation, however, can best be prevented, to the extent that the central bank considers it necessary or desirable to do so, through the carrying out of suitable open-market operations, which will be discussed in Chapters XI and XII.

ment banking operations in the central bank at least gives the latter a better opportunity of judging the general financial situation at any time, giving the appropriate advice to the Government and taking the necessary remedial measures

Another banking service rendered by the central bank is that of providing the Government with the foreign exchange required to meet its external debt service or its puchases of goods and other disbursements abroad, or buying any surplus foreign exchange which may accrue to the Government from foreign loans or from other sources In many debtor countries the Government requires relatively large amounts of foreign exchange to meet interest and other charges abroad; and the central bank has to acquire the requisite foreign exchange by purchase in the open market or by agreement with the commercial banks or the principal export industries, or by a combination of these methods.

Government's Agent and Adviser. In general, it may be said that the older central banks are required to perform a greater number and variety of services as agents of the Government than in the case of the newer central banks. The main reason for this is that, owing to the late appearance of the latter, the Treasuries of the countries concerned were already well developed and organised for the carrying out of such duties The trend has, however, been in the direction of passing some of these duties to the central bank from time to time. The Reserve Bank of New Zealand and the Bank of Canada, for example, were entrusted with the management of the national debt in 1936.

With the older central banks, the process of undertaking financial services for the Government developed more or less in accordance with the growing needs of the State. The Bank of England, for example, first took over from the Exchequer the duty of receiving subscriptions for Government loans in 1718. Then it undertook in 1751 the service of paying interest on the national debt. In due course it assumed all the duties connected with the administration and management of the national debt, including the floating debt. It undertakes the payment to stockholders of interest on the national debt; the keeping of transfer registers in respect of Government stocks; the receipt of subscriptions for Government loans and the making of all other arrangements in connection with the flotation, conversion or redemption of Government loans; the issue and redemption of Treasury bills; and the giving of advice and information regarding the state and trend of the money and capital markets, the terms and other

conditions on which new Government loans can be issued or old loans converted, etc.

Like the Bank of England, the Federal Reserve Banks of the United States perform numerous services as agents and advisers to the Treasury and Government institutions generally. They have, for example, taken over from the Treasury all the work connected with the distribution of its securities, whether bonds, Treasury notes or Treasury bills; they receive subscriptions for new issues and deliver the securities to subscribers; they cash interest coupons and pay off maturing obligations; they act as agents for the Reconstruction Finance Corporation, Home Owners' Loan Corporation, and other similar Government agencies, etc. In one way or another, such general services are also rendered by many other central banks.

Central banks, moreover, perform special agency services for the State. In all the countries which have introduced exchange stabilisation or equalisation funds, or payments or clearing agreements with other countries, the central banks have been entrusted with the administration of these funds and agreements, keeping separate banking accounts for these purposes and carrying out all the transactions in gold and foreign exchange connected therewith. The central bank likewise acts as the Government's agent where general exchange control, whether as a war or other emergency measure, is in force.

Advances by Central Bank to Government (prior to 1914). The obligation on the part of the central bank to grant advances to the Government was closely associated with its right of note issue, and in due course also with its function as the lender of last resort.

In the case of the Bank of England and several other central banks, the privilege of note issue was originally granted or extended in return for loans to the Government. The original capital of the Bank of England was £1,200,000, and the whole of this amount was advanced to the Government. In 1697 and in 1709, when the Government was again in need of funds, the Bank was authorised to increase its capital and its note issue in return for further loans to the Government. By 1721 the permanent debt of the Government to the Bank had risen in this manner to £9,375,000, and to £14,686,000 in 1800. This amount was reduced in 1833 to £11,015,000, at which figure the permanent debt of the Government to the Bank has remained ever since. This debt to the Bank has throughout its career been closely associated with its enjoyment of certain privileges conferred by legislation. In fact, since

1833 the legal position has been that these privileges could be abolished at any time upon twelve months' notice and upon repayment of the debt of £11,015,000.

With regard to temporary advances, the Bank began in 1718 to make advances to the Government 'in anticipation of the land and malt taxes, and upon exchequer bills and other securities'[1]. During the eighteenth century and until the 'forties of the nineteenth century, the Government financed most of its short-term requirements by means of Exchequer bills. The Bank of England itself usually held some Exchequer bills in its portfolio which it either purchased as an investment or rediscounted for third parties, and granted temporary advances to the Government to make up the deficiency between the issues of Exchequer bills and the needs of the Government. For various reasons, however, the Exchequer bill declined in popularity after 1840, and the Bank was called upon to make larger advances. These advances came to be known as ways and means advances Owing to the increasing needs of the Government, the Treasury bill was introduced in 1877 and made an attractive investment for the surplus funds of banks and the public by giving it a fixed currency (usually three months) and issuing it by tender under discount.[2] As a result of the extensive use of Treasury bills, the Bank was no longer required to make ways and means advances to any great extent.

Prior to 1914 the Bank of France had on several occasions to make substantial advances to the Government, for example, at the time of the Revolution in 1848 and the Franco-Prussian War in 1870, and in connection with the payment of the indemnity by France to Germany in 1871. These advances were intended to be of a temporary nature, and the greater part of these loans was repaid over a period of years, but beginning in 1857 each renewal of its charter and of its privilege of note issue was accompanied by an agreement on the part of the Bank of France to grant the Government a permanent loan. In 1897, when the permanent loan had increased to 180,000,000 francs, the Bank agreed to make it a non-interest bearing debt. According to Conant,[3] however, these renunciations of interest were offset by the fact that the Government carried in its current account at the Bank a sum which was usually equal to the amount of these loans. In 1911 the permanent debt of the Government to the Bank was increased

[1] Gilbart: Op. cit., Vol I, p. 36.
[2] King: *History of the London Discount Market*, pp 9, 13, 275-7.
[3] *History of Modern Banks of Issue*, p. 67.

by a further 20,000,000 francs to a total of 200,000,000 francs.

The Netherlands Bank was obliged by law in 1888 to grant accommodation to the Government in the form of advances on current account, subject to such advances not exceeding Fl.5,000,000 at any time and to interest being paid at the rate for ordinary advances. In 1903 the maximum for the Bank's advances to the Government was raised to Fl.15,000,000, and it was enacted that no interest should be charged thereon by the Bank.[1]

The Reichsbank was authorised to discount Treasury bills or Treasury certificates directly for the Treasury or for third parties, but prior to 1914 it was seldom called upon to hold much Treasury paper in its portfolio.

✓In general, therefore, it may be said that up to the time of the war of 1914-18 the financial relations between the State and the central bank were governed by a tradition that, in the interest of sound finance, the central bank should only be required, apart from a permanent or special loan in return for the monopoly of note issue, to grant advances to the Government which would be repaid within a relatively short period out of the proceeds of taxes or loans raised from the public.

✓The fundamental principle underlying this tradition was the recognition of the fact that, other things being equal, the granting of advances by the central bank to the Government[2] brings about not only a direct increase in the quantity of money in circulation, but also an increase in the supply of bank cash. To the extent that the proceeds of Government disbursements out of such advances (whether in the form of notes, coin or cheques on the central bank) are deposited by the recipients to the credit of their accounts with the commercial banks, the latter enjoy an increase in their cash resources[3] and, therefore, in their capacity to expand credit through increased advances, discounts and investments. The granting of advances to the Government by the central bank is thus a potential source of inflation, and it tends to undermine the latter's control over the money market.

✓When, however, in anticipation of receipts from taxation or

[1] *Foreign Banking Systems*, edited by Willis and Beckhart, p 738

[2] Where, however, the Government borrows from the central bank for the purpose of buying foreign exchange to meet commitments abroad, the effect will be a reduction in the gold and exchange reserves of the central bank, i e. a change in the composition of its assets and not in the total of its assets or in the quantity of money in circulation or in the cash resources of the commercial banks.

[3] Except when the receiving banks are indebted to the central bank and take the opportunity to reduce or discharge such debts Part of the new central bank credit will, of course, also be cancelled if recipients other than banks are indebted to the central bank and reduce or liquidate their indebtedness

from public loans, the Government needs funds which cannot conveniently or economically be obtained from the money market, either because of temporary stringency or because the issues and maturities of Treasury bills or other short-term securities could not be properly adjusted to the requirements of the Government, the central bank can perform a useful function by granting temporary advances to the Government. In the first place, if such an advance is liquidated within a short period, it does not serve as a source of inflation *per se*. Secondly, there are occasions during the year, particularly in countries where the money market is not well organised, when owing to a desire for liquidity by those liable for heavy dividend or tax payments a temporary stringency arises, and when central bank accommodation to the Government not only provides the latter with its needs for the time being but also helps to counteract the stringency by placing more funds at the disposal of the market. In other words, the quantity of money is increased at a time when the velocity of circulation has declined

The tradition regarding the necessity of limiting advances to the Government in the interest of sound currency applied, of course, also to other direct or indirect forms of central bank accommodation to the Government, such as discounting Treasury bills for the Government, subscribing to Government loans, buying Government securities in the open market or making advances on relatively favourable terms to banks and the public against Government securities. Thus, during the period under review the central banks usually held in their portfolios relatively small amounts of Government bonds and Treasury bills, which they obtained in the course of their rediscount and open-market operations as a matter of credit policy, or which they acquired as investments to defray part of their expenses or as cover for the fiduciary portion of their note issues where, as in England, such was the practice.

It was in this atmosphere that the Federal Reserve Act of the United States was passed in 1913, and accordingly the spirit as well as the letter of the law aimed at limiting the powers of the Federal Reserve Banks to grant accommodation to the Government, and thus also the capacity of the Government to demand accommodation from them. With regard to temporary accommodation, the Federal Reserve Act did not grant the Federal Reserve Banks the power to make advances on current account to the Government or to discount Treasury certificates or bills for

the Government, but it was arranged that Treasury overdrafts for a few days could be liquidated by means of a one-day certificate of indebtedness, issued by the Treasury to a Federal Reserve Bank to cover the amount of the overdraft on any particular day and replaced by another on the following day and so on until the proceeds of taxes, bonds or notes balanced the Government's accounts.

√The Federal Reserve Banks were also not given the power to rediscount Treasury certificates or bills for third parties, but they were authorised to rediscount for member banks their customers' paper issued or drawn for the purpose of carrying or trading in bonds and notes of the United States Government and endorsed by the member banks themselves, subject to a maximum maturity of ninety days for such paper. Furthermore, they were empowered to buy and sell Government bonds and notes, but only in the open market; and this power was intended to give the Federal Reserve Banks some control over money-market conditions by enabling them to conduct open-market operations like the Bank of England and the Reichsbank did at the time. In other words, it was not contemplated that the power to buy Government securities in the market should be used for the purpose of granting indirect accommodation to the Government.

Central Bank Accommodation to the State since 1914. The huge cost of the war of 1914-18 and the enormous loan requirements of the State placed a heavy burden on the credit structure of every country which was involved in that war Under the stress of this burden, central banking traditions had to be set aside and the central banks of all the belligerent countries had to assist in the process of adaptation to war economy. They were obliged to contribute, directly and indirectly, towards the financing of the war and of the extraordinary post-war expenditures. In other words, their actions were governed mainly by the requirements of war finance and post-war readjustment.

Towards the end of 1919 the central banks of Great Britain and the United States were liberated from the domination of State finance, and a policy of deflation was adopted which was continued until April, 1921. In such countries, however, as France, Germany, Italy and Belgium, the creation of central bank credit under pressure from the Government was continued for several years after the war; and as a result of this inflationary method of finance their currencies suffered varying degrees of depreciation, from one-fifth of the pre-war gold parity in France to

1/1,000,000,000,000th in Germany.

During the great depression of 1930-33 many central banks, old and new, were again called upon to make special advances to their Governments or to support Government credit in one way or another; and some of them continued to do so in the course of carrying out an official cheap-money and expansionist policy This creation of central bank credit was rendered possible by the general suspension of the gold standard.

With the outbreak of another war in Europe in September, 1939, and its subsequent world-wide extension, central banks were once more required to come to the wholesale aid of their respective Governments in war finance and the maintenance of cheap money, the net result being that the assets of many central banks now consist mainly of Government securities and advances to the Government.

Great Britain. In Great Britain substantial use was made of ways and means advances by the Bank of England to the Government during the period 1914-19, while the Bank also increased its holdings of Government and other securities. This creation of central bank credit caused an increase in the cash of the commercial banks, which in turn enabled them to buy more Government securities and increase their advances. Moreover, the issue of currency notes[1] by the Treasury had the same expansionist effect as central bank credit. In general, however, less use was made in Great Britain of central bank credit (including the Treasury notes) and greater use of taxation and of the capital resources of the community than in the other belligerent countries of Europe.

With regard to the financial crisis of 1931 and its aftermath, the Bank of England was not called upon to do much in the way of advances to the Government, but it increased its holdings of Government securities on various occasions between 1932 and 1939 as a means of supporting Government credit and as a matter of monetary policy.[2]

During World War II the Bank's contribution to war finance and to the maintenance of cheap money is reflected in the increase in its total holdings of Government securities[3] from £700,300,000

[1] The amount of Treasury currency notes at the time of their amalgamation with the Bank of England note issue in 1928 was £285,000,000

[2] See the section on 'Open-Market Operations in Great Britain' in Chapter XI.

[3] Ways and means advances are included under Government securities. These amounted, for example, to £29,500,000 on 30th June, and £59,200,000 on 30th December, 1944

on 6th September, 1939, to £1,018,600,000 on 31st December, 1941, and £1,710,000,000 in December, 1945. At the end of 1953 the amount was £1,990,000,000.

United States. In 1917-19 the Federal Reserve Banks increased their holdings of Government securities and made large advances to member banks against their promissory notes covered by Government securities, and indirectly to non-member banks as well. The expansion of central bank credit was even facilitated by making the advances against Government securities at interest rates equal to or lower than those carried by the securities themselves, and also at preferential rates as compared with commercial paper. No great use was, however, made of certificates of indebtedness as a means of direct accommodation to the Government.

As in the case of the Bank of England, the Federal Reserve Banks increased their open-market purchases of Government securities during the year 1931-33, but on a much larger scale. For example, they increased their holdings of Government securities from about $300,000,000 in 1929 to $2,430,000,000 by the end of 1933. These operations formed part of a monetary policy designed to promote reflation and counteract deflation and depression.[1]

When the United States entered the war in December, 1941, the Federal Reserve Banks' holdings of Government securities stood at $2,184,000,000. As in 1917-19, the Federal Reserve System was called upon to assist in financing the Government's war effort by increasing its holdings of Government securities either through open-market operations[2] or through advances to member banks against Government securities. In October, 1942, all the Federal Reserve Banks reduced the rate for advances to member banks secured by Government obligations maturing or callable in one year or less from 1 to ½ per cent.; and the Federal Reserve System also undertook to buy Treasury bills from member banks at 3/8 per cent., with the latter retaining an option to repurchase the bills at any time before maturity In November, 1942, the Federal Reserve Bulletin reported that 'in recent months the Federal Reserve System has made large purchases of Govern-

[1] See the section on 'Open-Market Operations in the United States' in Chapter XI.

[2] In March, 1942, the Federal Reserve System was also authorised to buy or sell Government securities (and certain Government-guaranteed securities having a maturity not exceeding six months) directly from or to the United States Government, provided that the aggregate amount of such securities acquired directly from the Government which were held at any one time by the twelve Federal Reserve Banks did not exceed $5,000,000,000

ment securities principally for the purpose of providing to the banks an adequate amount of reserves to form the basis for such purchases of United States Government securities as are offered to the banks'.

The System's holdings of Government securities bought in the open market or acquired directly from member banks increased from $2,184,000,000 on 3rd December, 1941, to $5,989,000,000 on 31st December, 1942, and $24,300,000,000 in December, 1945. At the end of 1953 the amount was $26,000,000,000.

France. In France it was the general practice for the Government in an emergency to resort to direct borrowing from the central bank, rather than to the indirect method of requiring the central bank to increase its holdings of Government securities by purchase or subscription. During the war of 1914-18 the Bank of France was obliged to make enormous advances to the Government, since for various reasons increased taxation was not adopted as an important means of war finance. This inflationary method was continued by France after 1918, when a series of budget deficits caused the Government to resort to further borrowing from the Bank until the advances reached the huge total of 38,000,000,000 francs in July, 1926.[1]

These advances were finally repaid in 1928 partly out of a new long-term loan floated by the Government, and partly out of the profit resulting from the revaluation of the Bank's gold and exchange holdings when the franc was finally stabilised at one-fifth of its former gold parity Under a convention concluded in the same year, however, the Bank agreed to grant the Government a loan of 3,000,000,000 francs without interest, in addition to the old permanent loan of 200,000,000 francs referred to previously.

During the period 1931-35, a further series of budget deficits caused heavy borrowing by the Government in the form of Treasury notes with currencies ranging from three to twenty-four months, owing to the difficulty of floating long-term loans on favourable terms. By the beginning of 1935, the banks and other institutions had so many Treasury notes in their portfolios that they were unwilling to buy more, since under prevailing practice the Bank of France rediscounted these notes only when they had a maturity of less than three months. In this emergency the Treasury approached the Bank with a view to its rediscounting,

[1] As the counterpart of the increase in advances to the State, the note circulation of the Bank of France rose from 6,000 million francs in July, 1914, to 56,000 million in July, 1926, and its deposits from 1,000 million to 4,000 million francs respectively.

or accepting as collateral for advances, Treasury notes and National Defence notes with maturities exceeding three months. The Bank at first declined to do so on the grounds, firstly, that Government borrowing from the Bank over and above the permanent loan of 3,200,000,000 francs was forbidden under the convention of 1928, and secondly, that the rediscounting of Treasury paper under such conditions would be tantamount to an indirect loan to the Treasury and would be strongly conducive to inflation. With a change of Governor the Bank ultimately submitted, but on the condition that advances on the security of such Treasury obligations be published as a separate item in the weekly report of the Bank, 'so that the public might be informed if the amount rose too rapidly and became a threat of inflation'[1].

The accentuation of the financial emergency in France by the continued flight of capital caused the Government to exert further pressure on the Bank, which then discounted Treasury bills on a considerable scale and grouped them together with commercial bills for more than a year. Under a convention of June, 1936, these indirect borrowings from the Bank, amounting at the time to 13,800,000,000 francs, were consolidated and regularised as provisional non-interest bearing advances to the State, and provision was made for additional borrowing facilities of 10,000,000,000 francs. During 1937-38 other conventions were concluded between the Bank and the State, providing for further facilities up to 30,000,000,000 francs.

These provisional advances had reached a total of over 50,000,000,000 francs in November, 1938, when a further convention was concluded between the Bank and the State, under which the profit resulting from the revaluation of the Bank's gold holdings at 170 francs to the £ was allocated towards part repayment of the provisional advances and the permanent State debt to the Bank was raised from 3,200,000,000 to 10,000,000,000 francs. The provisional advances which were reduced by these means to 20,627,000,000 francs on 17th November, 1938, remained at that level till the outbreak of war in September, 1939, and were finally repaid in March, 1940, out of the profit on the further revaluation of the Bank's gold holdings. In the meantime, however, new advances had to be granted to the Government, amounting to 14,750,000,000 francs on 4th January, 1940, and 32,600,000,000 francs by the end of May, 1940, shortly before the collapse of France.

[1] M Myers *Paris as a Financial Centre*, pp 16-7.

After the collapse of France, the Bank's advances to the Government grew by leaps and bounds. On 26th December, 1940, the amount stood at 136,217,000,000 francs, of which 72,000,000,000 francs represented the costs of the German army of occupation, and by the end of 1944 the total amount stood at 442,000,000,000 francs, of which 426,000,000,000 francs were allotted to meet the costs of occupation After the war there was a further large increase in the Bank's advances to the Government and in its holdings of Government securities, namely, to a total of 931,000,000,000 francs at the end of 1952. As the counterpart of these and other credit operations, the note circulation of the Bank rose from 151,322,000,000 francs at the end of 1939 to 218,383,000,000 at the end of 1940, 572,500,000,000 at the end of 1944 and 2,123,000,000,000 at the end of 1952, and the franc, which had already undergone serious depreciation in terms of the dollar and gold between 1936 and 1938, suffered further depreciation thereafter, on several occasions.

Margaret Myers[1] said of the Bank of France, in 1936, that 'the history of the relationship between Bank and Government resolves itself into a series of struggles in which the Bank has striven to maintain its independence and the Government has tried to bend the Bank to its own interests'. In general, the experience of the Bank of France has shown clearly the dangers and disadvantages to a country emanating from undue Government pressure on the central bank in times of financial strain.

Germany. In Germany the central bank was also called upon to take a leading part in the financing of the war of 1914-18 and of the Government's post-war requirements. The procedure adopted was that of discounting by the Reichsbank of three-months' Treasury bills or Treasury certificates, in anticipation of public loans to be floated every six months. During the first two years of the war the proceeds of such loans were sufficient to repay the Treasury bills discounted by the Reichsbank, but thereafter there was a progressive increase in the excess of Treasury bills outstanding over loans issued At the end of 1918 the floating debt of the German Government amounted to 55,200,000,000 marks, a large part of which consisted of bills discounted directly by the Reichsbank. The counterpart of this inflationary method of finance was an increase in the note circulation of the Reichsbank from 1,958,000,000 marks in 1913 to 22,200,000,000 marks at the end of 1918. Under the difficult conditions with which the Govern-

[1] Op. cit., p 45

ment and the Reichsbank were faced during the post-war period, the process of inflation through the discounting of Treasury bills and other methods of credit creation by the Reichsbank was accelerated until it reached astronomical proportions towards the end of 1923[1] The resultant depreciation and collapse of the mark was followed by the establishment of the Rentenbank and the stabilisation of the mark on the basis of 1 rentenmark (or goldmark) for 1,000,000,000,000 paper marks The Rentenbank was ordered to grant the Government a credit of 1,200,000,000 rentenmarks, of which 300,000,000 rentenmarks were to be used for the repayment of the Treasury bills held by the Reichsbank, and no further Treasury bills were to be discounted with the Reichsbank.

The Reichsbank was reconstituted in 1924 with the aid of the Dawes loan and made independent of the Government. Under the new law its powers of granting accommodation to the Government were narrowly defined. It was authorised to make advances to the Government to a maximum of 100,000,000 reichsmarks, but at the end of each year (altered in 1930 to 15th July) the Government was to be free of direct debt to the Reichsbank. To the Post Office and the Railways the Reichsbank could also grant short-term credits up to a maximum of 200,000,000 reichsmarks. Finally, the Reichsbank was empowered to discount Treasury bills for third parties up to a maximum of 400,000,000 reichsmarks.

With the financial stringency in Germany resulting from the large withdrawal of foreign balances in 1931 and the difficulty of obtaining and renewing foreign credits, and with an intensive Government programme of relief and reconstruction after 1933, the Reichsbank was again called upon to place its credit at the disposal of the German economy, but rather in the form of rediscounts[2] to the commercial banks and other credit or financial institutions than direct accommodation to the Government. This was reflected in the increase in the discounts and advances of the Reichsbank from 2,537,000,000 reichsmarks at the end of 1930 to 8,200,000,000 reichsmarks at the end of June, 1939. Under the

[1] Treasury bills outstanding amounted to 191,580,465,422 milliard marks in the middle of November, 1923, and Reichsbank notes in circulation to 496,507,425,000 milliard marks in December, 1923. (Parchmann, *Die Reichsbank*, pp 27-39.)

[2] For a number of years the German Government met a large part of its requirements by issuing special bills (*Sonderwechsel*) to its contractors, and these bills enjoyed unrestricted facilities for discount at the Reichsbank, which was, in fact, called upon to rediscount large amounts of such bills In March, 1938, however, the issue of *Sonderwechsel* was discontinued and followed, first, by 'delivery certificates', and subsequently, in April, 1939, by 'tax anticipation certificates', which were in turn discontinued as from 1st November, 1939.

law of 1939, however, the Reichsbank was empowered to grant credits to the Government up to a maximum amount determined by the Führer, and to hold Treasury bills with a maturity of not more than three months, to a total specified by the Führer.

These powers were freely used after June, 1939, first in connection with preparation and mobilisation and then with actual war,[1] as is reflected in two items of the Reichsbank statement: (1) 'bills and cheques', which included Treasury bills and which increased from 8,159 million reichsmarks on 30th June, 1939, to 15,419 million in December, 1940, and 63,497 million in December, 1944; and (2) 'notes in circulation', which increased from 8,223 million reichsmarks in December, 1938, to 14,033 million in December, 1940, and 50,102 million in December, 1944.

Relations between State and New Central Banks. As a result of the unfortunate, sometimes disastrous, experiences which central banks had with the financing of Governments during the 1914-18 war and post-war periods, the large number of central banks which were newly established or reorganised after that war had their powers of making advances to the State or buying Government securities severely restricted.

The central banks of Chile and Colombia, for example, were prohibited from buying, or making advances against, Government and Municipal obligations to a total amount in excess of 30 per cent. of their paid-up capital and surplus, and also from granting floating credits or allowing overdrafts to their Governments. The South African Reserve Bank was allowed only to buy, or make advances against, Government securities and Treasury bills of not more than six months' currency, and to invest sums not exceeding capital and reserve in Government securities of not more than two years' currency. The Reserve Bank of Peru was authorised to acquire Government securities only if offered by banks as collateral for their promissory notes to be discounted by the Bank, subject to a maximum currency of ninety days for the promissory notes and subject also to a maximum advance of 90 per cent. of the market value of Government securities; and it was prohibited from granting loans on current account to the Government.

[1] 'The Reichsbank recognised the manifest duty at the outbreak of the war of placing itself at the disposal of the Reich for the financing of the Reich's projects, not only indirectly through utilising the latent possibilities of the German money market, but also directly through contributing its own credit resources'—*Annual Report of Reichsbank for 1939*

The National Bank of Czechoslovakia was not allowed to grant directly or indirectly any credit to the State, or to acquire State bonds for its own account, except that one-half of the reserve fund was to be invested in State bonds of the Republic, but it was authorised to make advances against Government securities for a period not exceeding three months. The National Banks of Austria and Hungary were prohibited from entering into business relations with the State which involved the granting of loans or credits to the State, but they were allowed to make advances against Government securities for not more than three months and to discount three months' bills drawn by State commercial undertakings provided they were managed as independent enterprises with separate accounts. The powers of the reorganised Reichsbank were, as stated previously, also narrowly defined.

Under the stress, however, of the world-wide depression of 1930-33, many of these central banks became the victims of Government pressure. Not only were their powers of granting accommodation to the State increased or the restrictions thereon suspended, but they were virtually obliged to provide the financial facilities demanded by their Governments.

In Chile and Colombia, the maximum holdings of Government paper by the central banks were at first raised in 1931 from 30 per cent. of their paid-up capital and surplus to 45 per cent in the latter country and 80 per cent. in the former, but shortly afterwards these limits were suspended and the central banks were then authorised by legislation from time to time to make specific advances to the State. The same procedure was adopted in the case of the related central banks of Peru, Ecuador and Bolivia. As a result of this legislative authority combined with Government pressure, the central banks of South America were faced with a considerable increase in their holdings of Government paper.

The new or reorganised central banks of Europe underwent a similar experience. Budget deficits and assistance to failing banks and depressed industries forced the State to bring pressure to bear on the central bank for accommodation in one way or another, e g. in Austria, Hungary, Poland, Bulgaria and Greece. The result was that State debt again figured prominently in the balance sheets of these banks.

With regard to the new central banks which were established after 1932, those of Argentina and Salvador, for example, were

subject to severe restrictions in their relations with the State. The Central Bank of Argentina could make advances to the Government subject to a maximum of 10 per cent. of the estimated revenue for the fiscal year, and that of Salvador up to 10 per cent. of the estimated customs revenue. With regard to Government securities, the Central Bank of Argentina could buy Government securities only within strict limits, while that of Salvador was prohibited from holding Government securities as investments. In recent years, however, these restrictions have been substantially lessened.

The central banks of India, New Zealand and Canada, on the other hand, had fewer restrictions imposed on them from the outset; and in the case of the latter two the restrictions were subsequently relaxed. For example, under the amendments of its Act in 1936 and 1937 the Reserve Bank of New Zealand was authorised to grant advances to the Government up to the full amount of the estimated revenue for the fiscal year, and to buy or advance against Government and Government-guaranteed bonds of any amount and any maturity, as well as to buy or rediscount Treasury bills maturing within three months. Moreover, it was empowered to grant accommodation to the Government, by way of overdraft, for the purpose of financing the purchase and marketing of any New Zealand produce under the Primary Products Marketing Act; and it was also given the power to underwrite Government loans

Present Position of Government Debt in Central Bank Assets. The wholesale creation of central bank credit through purchases of Government securities and advances to the Government (whether as a matter of general monetary and financial policy or as a means of financing war or defence, or both) has brought about a considerable change in the composition, as well as a large increase in the total, of the assets of central banks in many countries. In some countries, as in Great Britain and Canada, the concentration of the gold and exchange reserves in an Exchange Equalisation Account or Foreign Exchange Control Board has still further contributed towards increasing the central bank's holdings of Government paper.

The following table shows the large increase, between 1929 and 1952, in the proportion of the total assets of various central banks which consists of their holdings of domestic Government securities and advances to the Government:

PERCENTAGE PROPORTION OF TOTAL ASSETS OF CENTRAL BANKS CONSISTING OF GOVERNMENT SECURITIES AND ADVANCES TO GOVERNMENT AT THE END OF 1929, 1936, 1943 AND 1952

Bank	1929	1936	1943	1952
	%	%	%	%
Bank of England	60.7	48.7	98.5	97.0
Bank of Canada	—	45.0	96.3	93.5
Bank of France	9.9	25.1	81.1	40.0
Reichsbank	6.6	11.6	94.3	—
Commonwealth Bank of Australia	30.0	49.3	70.0	50.0
Bank of Japan	10.1	40.8	56.6	42.2
Federal Reserve Banks	9.4	19.4	35.7	47.8
Riksbank of Sweden	2.4	1.8	30.5	52.3
Central Bank of Chile	4.1	65.0	21.5	27.5

It will be observed from the foregoing table that the assets of various central banks now consist largely of domestic Government debt in one form or another, as compared with the position of years ago when their assets represented mainly gold, foreign exchange, domestic trade bills and advances to banks and other financial institutions. At present it is only in countries such as the Union of South Africa, Switzerland, Portugal, India, Ceylon and some countries of Latin America where domestic Government debt assumes a subordinate position amongst the assets of the central bank; and in most of these countries the relative proportion of Government debt has also increased since 1929.

Conclusions. In reviewing the financial relations between the State and the central bank during the past hundred years, one observes a series of trends towards alternate increases and decreases in the degree of Government pressure and reliance on the central bank for direct and indirect accommodation. During the nineteenth century there were various examples of undue Government pressure on banks of issue until about the 'seventies and 'eighties when, coinciding with the general stabilisation of currencies by means of the world-wide extension of the gold standard, there developed a strong tendency towards the adoption of a conservative financial policy by the State and the granting of greater independence to the central bank. This condition prevailed until 1914 when, with the waging of war and the suspension of the gold standard, central banking traditions were set aside and

central banks were reduced to subservience to the needs of the State. As a result of this, varying degrees of currency depreciation took place during and after the war.

During the period 1923-28, however, coinciding once again with the stabilization of currencies through the gradual restoration of the international gold standard, State debts to the central banks were reduced and consolidated and the majority of central banks were liberated from the domination of State finance. Moreover, the many new central banks which were established at this time were restricted by legislation in their advances to the State and in their holdings of Government paper generally.

The reverse process commenced in 1930 and was accentuated by the financial crisis in Central Europe in the middle of 1931, followed by the suspension of the gold standard in Great Britain and, subsequently, in practically the remainder of the world; and it was, of course, given further impetus by the outbreak of war in Europe in 1939 and its subsequent extension over a large part of the world.

Even allowing for the abnormal circumstances of war, it appears to be no mere coincidence that the degree of Government pressure and reliance on the central bank has varied with the maintenance or suspension of the gold standard. It is virtually an axiom that the gold standard, as a means of maintaining exchange stability, automatically imposes a large measure of discipline on the economic life of a nation and demands the freedom of the central bank from political expediency. During periods of suspension of such exchange stability, the Government is not faced with the same necessity of exerting itself to make ends meet. With 'managed money', the Government is subject to the temptation of resorting to the central bank as a ready and convenient means of obtaining credit, which would enable it to take the line of least resistance. Thus, the central bank which, through the centralisation of the note issue and reserves, can be a powerful instrument for good, may for the same reasons be converted into a powerful instrument for evil. History is full of examples of inflation and currency depreciation resulting from credit creation on behalf of the State. In fact, experience has shown that heavy Government borrowing, either directly from the central bank or indirectly through open-market operations and rediscounts, is the easiest means, and sometimes the only means, of bringing about substantial inflation In this respect, therefore, it is also not just a coincidence that the degree of expansion of central bank credit

for Government purposes has had some relationship with the extent of currency depreciation.

It is important that the true relative position between the Government and the central bank in matters of monetary policy should be fully accepted by both parties The Government should be recognised as the ultimate authority responsible for laying down the monetary policy and monetary standard of its country, and the central bank as the party responsible for carrying out the monetary policy and maintaining the monetary standard, as well as safeguarding the national economic welfare to the best of its ability. In view of these responsibilities, the central bank should not only be consulted by the Government in the formulation of the monetary policy, but should also be given a relatively free hand and assisted wherever possible by the Government in carrying out such monetary policy. On the other hand, the central bank should not be unmindful of the difficult and extenuating circumstances in which the Government is placed in times of prolonged war and acute economic depression.

In short, the Government and the central bank have mutual interests and complementary duties and responsibilities The Government as representing the nation should have the support, respect, sympathy and advice of the central bank, and the latter as the centre of the nation's monetary and banking system is entitled to the same from the Government. No party should resort to exerting undue pressure or making undue claims on the other. Both are organised for the purpose of serving the public interest in their individual capacities, and while the maximum good can only be achieved through their full co-operation and mutual consideration for one another's duties and responsibilities, nothing but evil can result from the lack of such co-operation and consideration.

CHAPTER IV

THE CENTRAL BANK AS THE CUSTODIAN OF THE CASH RESERVES OF THE COMMERCIAL BANKS

Evolution of Reserve Function. The central bank has become the custodian of the commercial banks' cash reserves by a process of evolution which was closely associated with its functions as the bank of issue and the Government's banker.

In England, for example, the private banks of the eighteenth century had discovered that there was an advantage in keeping an account with the Bank of England, for the reasons that it was the bank whose notes commanded the greatest confidence and the widest circulation in the country and that it was developing more and more as the Government's banker and agent. The tendency to keep larger balances with the Bank of England grew as time went on, until it became the traditional practice of the private banks to entrust their surplus cash to the Bank When the widespread establishment of joint-stock banks in England began in 1826, the custom of maintaining balances with the Bank was also adopted by these banks The Scottish and Irish banks similarly found it convenient and advantageous to keep balances with the Bank of England. The practice was further developed when the Bank opened branches in various parts of England and when, in 1854, it assumed the function of a settlement bank, i.e. settlement of the clearance differences between banks

This process of evolution also took place in other countries according as one bank became the sole or principal bank of issue and the Government's banker. Thus, like the Bank of England and for the same reasons the special bank of issue in every other country came to be accepted as the custodian of the commercial banks' cash reserves; and, as will be explained in the following chapter, it was the custody of the banks' surplus cash plus the sole or principal right of note issue which automatically made the special bank of issue also the custodian of its country's metallic reserves. In fact, the custody of reserves was part and parcel of the development of such banks into central banks.

With the establishment of the Federal Reserve Banks in the United States, a new principle regarding bank reserves was introduced, namely, a statutory provision that member banks had to maintain with their respective Reserve Banks minimum credit balances depending upon the amount of their time and demand liabilities; and this feature was incorporated, in one form or another, in the statutes of several of the central banks which were subsequently established in South Africa, South and Central America, New Zealand, India, etc. In most countries, however, it is still the position that commercial banks voluntarily keep substantial balances with the central bank, part of which serves as working balances for clearing purposes and the remainder as cash reserves for general purposes. On the whole, it can be said that, for reasons of convenience and mutual advantage if not for other reasons, commercial banks everywhere have come to entrust their surplus cash to the central bank

Significance of Centralised Cash Reserves. The centralisation of cash reserves in the central bank is a source of great strength to the banking system of any country. Centralised cash reserves can at least serve as the basis of a larger and more elastic credit structure than if the same amount were scattered among the individual banks. It is obvious that, when bank reserves are pooled in one institution which is, moreover, charged with the responsibility of safeguarding the national economic interest, such reserves can be employed to the fullest extent possible and in the most effective manner during periods of seasonal strain and in financial crises or general emergencies.

Referring to 'the shift of required reserves from the vaults of member banks to the vaults of the Federal Reserve Banks', Burgess[1] pointed out that it 'was not simply a change in physical location', but that it 'made a change in the character and effectiveness of the reserves and enabled them to serve more adequately their original purposes'. He also emphasised that there are two kinds of emergencies to be met. In the one case, when only a few banks need additional funds, the reserves 'can be shifted to the point where the need is greatest at any time', while in the other, when the need for funds is general, the centralised reserves can be used to increase the total amount of funds available.

The centralisation of cash reserves is conducive to economy in their use and to increased elasticity and liquidity of the banking

[1] *Reserve Banks and the Money Market* Revised Edition (Harper), pp. 26-27

system and of the credit structure as a whole, but only in an indirect manner. It is, in fact, the central bank's function of rediscount and lender of last resort which directly serves to promote such economy, elasticity and liquidity. In the absence of a central bank and centralised reserves, each of the commercial banks would, for example, have to carry more cash in order to cope with seasonal strains and possible emergencies than if there were a central bank from which the banks could, directly or indirectly and individually or collectively, obtain the necessary accommodation at such times. In short, with a central bank to fall back upon in case of need the commercial banks can with safety conduct either a larger volume of business with the same cash reserve or the same amount of business with a smaller reserve than if they have to depend only on their own individual resources and on such money market facilities as are available. The important point about centralised cash reserves is, however, that they serve to increase the capacity of the central bank to rediscount or otherwise create credit for the purpose of meeting the cash requirements of the commercial banks or of the money market generally.[1]

The statutory provision for the holding by commercial banks of minimum credit balances with the central bank, which was first introduced in the United States and adopted by several other countries where central banks were only established at a comparatively late stage of banking development, was designed to secure at least a minimum of the advantages of centralised cash reserves and to strengthen the general financial position of the central bank and its capacity to control credit in the common interest It was, in other words, the urgency of a strong central banking structure and the absence of banking tradition in regard to the holding of cash reserves in a central bank which were mainly responsible for the imposition of such statutory requirements in certain countries. Where, however, the practice is voluntarily followed by the commercial banks, it naturally acts as a deterrent to the introduction of a legal minimum.

Statutory Minimum Cash Reserves in Some Countries. Under the original Federal Reserve Act of the United States, the member banks[2] were required to hold minimum cash reserves amounting

[1] In this connection the central bank's right of note issue is, of course, also important as a means of supplying legal-tender currency, while its custody of the nation's metallic and foreign exchange reserves (as a counterpart of its issue of notes and its custody of the banks' cash reserves) enables it better to meet the ultimate exchange requirements of the commercial banks or of the exchange market generally.

[2] All the national banks (operating under the National Bank Act) had to become member banks, while the State banks (operating under laws or charters of the

to 5 per cent. of their time deposits and 12, 15 or 18 per cent. of their demand deposits[1] depending upon whether they were country banks, reserve city banks or central reserve city banks[2] respectively. Of these reserves, they had to hold certain minimum proportions in the Federal Reserve Bank of their particular district and in their own vaults, and the balance either in the former or the latter or both. In 1917, however, an important alteration was made. Instead of distinguishing between the minimum reserves to be kept with the Reserve Bank and those in their own vaults, the law laid down merely the minimum reserves which the member banks should keep with their Reserve Bank and which were fixed at 3 per cent. of their time deposits and 7, 10 or 13 per cent. of their demand deposits depending upon whether they were country, reserve city or central reserve city banks.[3] As to the remainder of their cash reserves, member banks were left entirely to their own discretion as to what amount they should keep on hand as till money or as reserves in their own vaults or as working balances with correspondent banks or as excess balances with their Federal Reserve Banks.

When the establishment of the South African Reserve Bank was under consideration in 1920, it was decided to incorporate this feature of the Federal Reserve Act and to require 'every bank[4] transacting business in the Union of South Africa' to maintain with the Reserve Bank minimum reserve balances amounting to 3 per cent. of their time liabilities in the Union and 13 per cent. of their demand liabilities (reduced to 10 per cent in 1923).

individual States) which conformed to certain requirements and conditions could become members on application. Of 14,089 commercial banks in operation at the end of 1951, there were 6,840 member banks, of which 4,939 were national banks and 1,901 State banks These member banks, however, hold almost 85 per cent of the total deposits at commercial banks in the United States.

In a joint report to Congress at the end of 1940 the Board of Governors of the Federal Reserve System, the Presidents of the Federal Reserve Banks and the Federal Advisory Council recommended *inter alia* that Congress 'make reserve requirements applicable to all banks receiving demand deposits regardless of whether or not they are members of the Federal Reserve System' This recommendation has, however, not been implemented

[1] The distinction made between time and demand deposits was to the effect that the former were deposits subject to notice of withdrawal within not less than thirty days, and the latter in less than thirty days

[2] Under the original Act provision was made for three central reserve cities, but these were subsequently reduced to two (New York and Chicago), the reserve city banks were located in the other important business centres (over 50), and the country banks comprised those in the remaining areas.

[3] Subsequent amendments of these provisions will be discussed later.

[4] For this purpose, a bank was defined in the original Act as any person, firm or company using in its description or title 'bank' or 'banker' or 'banking', or receiving or accepting deposits of money subject to withdrawal by cheque, draft or order.

Mexico followed suit in 1932 under the new law of the Bank of Mexico, which required all banks accepting deposits for less than thirty days to keep with the Bank minimum credit balances equivalent to 5 per cent. of their deposit liabilities.[1] In New Zealand, on the establishment of the Reserve Bank in 1934, it was laid down that 'all banks carrying on business in New Zealand' were to maintain balances in the Bank amounting to not less than 3 per cent. of their time liabilities and 7 per cent of their demand liabilities in New Zealand. In India, minimum balances were also to be kept with the Reserve Bank by the 'scheduled' banks[2] on the basis of 2 per cent of time liabilities and 5 per cent. of demand liabilities, but contrary to the practice in the United States, South Africa and New Zealand, demand liabilities in India are interpreted as liabilities to be met on demand, i.e. within twenty-four hours, instead of within thirty days In Argentina, the banks had to maintain total cash reserves equal to not less than 8 per cent. of their time deposits and 16 per cent. of their demand deposits, and of these minimum reserves two-thirds had to be held with the Central Bank, i.e. they had to keep with the Central Bank minimum balances amounting to 5-1/3 per cent of their time deposits and 10-2/3 per cent. of their demand deposits. In Brazil, the other banks had to keep 4 per cent. of their time deposits and 8 per cent. of their demand deposits with the Bank of Brazil; and in Paraguay, the banks also had to maintain 20 per cent. of their sight deposits, 15 per cent. of their fixed deposits and 10 per cent. of their savings-account deposits with the Bank of Paraguay.

The principle of minimum balances to be maintained by the commercial banks with the central bank, in one form or another, has also been adopted by Ecuador, Venezuela, Sweden, Australia and Egypt and by several of the newer central banks, such as those of Ireland, Western Germany, Ceylon, Pakistan, Burma and the Philippines.

In a number of other countries, minimum cash-reserve ratios were also imposed by law on the commercial banks either in

Under the Banking Act of 1942, however, the provision regarding reserve balances was confined to 'commercial banks', which were defined as persons who carry on a business of which a substantial part consists of the acceptance of deposits of money withdrawable by cheque

[1] Subsequent amendments of these provisions will be discussed later

[2] I e. the banks specifically named in the Second Schedule of the Reserve Bank of India Act. Under the Banking Companies Act of 1949, however, all other banks were required to maintain in cash or as balances with the Reserve Bank 2 per cent. and 5 per cent. of their time and demand liabilities respectively.

respect of their demand liabilities only, as in Denmark, Portugal and Roumania, or in respect of both their time and demand liabilities, as in Bolivia, Canada, Chile, Colombia, Greece and Switzerland, but in all these cases no provision was made for minimum balances to be maintained with the central banks. In other words, while their cash reserves had, with few exceptions, to be held in the form of notes, coin and balances with the central bank, no minimum proportion of such reserves to be kept with the central bank was laid down, as in the case of Argentina. Their general practice, however, has been to maintain substantial balances with the central bank.

In Canada, for example, it was decided to make no distinction between time and demand liabilities in the matter of legal reserve requirements. The commercial banks were required to hold cash reserves equal to not less than 5 per cent. of all their deposit liabilities within Canada, but they were allowed to include in the cash reserves to be held by them not only their balances with the Bank of Canada, but also Bank of Canada notes held in their tills or vaults.

New Methods Investigated and Introduced in United States. At the end of 1929, a Committee of officers of the Federal Reserve System was appointed to enquire into ways and means of establishing bank reserves 'on a more logical or effective basis than now appears to be possible under present laws' According to their report, the existing system of legal requirements for member bank reserves had 'not operated to relate the expansion of member bank credit to the needs of trade and industry, nor has it adequately reflected changes in the volume and activity of member bank credit' They held that, although the law 'in requiring lower reserves against time deposits than against demand deposits, and lower reserves against the demand deposits of country banks than against the demand deposits of reserve and central reserve city banks may have been expected to impose higher reserves on more active deposits than on less active deposits', in practice it did not sufficiently take into account the velocity of the turnover of deposits Moreover, whenever there was a shift from demand to time deposits, the existing system permitted a large expansion in the total volume of bank credit without a corresponding increase in the cash reserves which member banks had to maintain with the Reserve Banks.[1]

To remedy these defects, the Committee considered that an

[1] *Report of the Committee on Bank Reserves of the Federal Reserve System*, p. 5

entirely new approach to the reserve problem was necessary They proposed that 'the formula used in calculating reserve requirements take into account directly, instead of indirectly as in the existing law, the activity as well as the volume of the deposits held by each individual member bank, without regard to the location of the bank or the terms of withdrawal on which the deposits are technically held', and, therefore, that 'each member bank be required to hold a reserve equivalent to (*a*) 5 per cent. of its total net deposits, plus (*b*) 50 per cent. of the average daily withdrawals actually made from all of its deposit accounts'.[1] Their proposals thus provided for the removal of the distinction between time and demand deposits and between country, reserve city and central reserve city banks, and for the inclusion in the legal reserves of member banks of their vault cash, with certain limitations.

It was considered by the Committee that their proposed formula would increase the Reserve Banks' powers of control over credit conditions, particularly since in a period of rapidly expanding activity and growing speculation the velocity or rate of turnover of deposits would also tend to increase considerably, and this would automatically increase the reserve balances which the member banks would be required to keep with the Reserve Banks under section (*b*) of the formula. Moreover, under this formula a shift from demand to time deposits would not increase the credit-creating capacity of the member banks to nearly the same extent as under the old system.

In 1932 the Federal Reserve Board[2] expressed the opinion 'that the adoption of a system of reserves based on velocity of accounts as well as on their volume, as recommended by the System's Committee on reserves, would be an important step in strengthening the influence that the Federal Reserve System could exert in the direction of sound credit conditions'.

The Committee's proposals were not, however, translated into law.[3] Instead, while the old formula as amended in 1917 was retained, legislation was formally passed in 1935 authorising the Board of Governors of the Federal Reserve System (formerly Federal Reserve Board) to change the member banks' reserve requirements by regulation 'in order to prevent injurious credit expansion or contraction', the minimum reserve percentages not to be less than those laid down in 1917 nor more than twice such

[1] Ibid , p 6
[2] *Annual Report for* 1932, p 26
[3] The new formula proposed by the committee was tried out by Mexico for a period (1936-41). See Chapter XIII

percentages. The power to change the minimum reserves to be kept with the Reserve Banks by the member banks was intended as an additional means of enabling the Reserve Banks to control the money market and to contract or expand the credit-creating capacity of the member banks. Details of the application of this power and of its adoption by various other countries will be given in the section on 'changes in reserve requirements' in Chapter XIII.

General Observations. It has been shown that the older central banks were gradually entrusted by the commercial banks with the custody of their surplus cash, because of the convenience and other advantages which accrued therefrom to banks individually and to the banking system as a whole; that the custody of bank reserves was part and parcel of the development of central banks as such; and that the statutory provision for the holding by commercial banks of minimum credit balances with the central bank, which was adopted by the United States and several other countries, was designed to secure at least a minimum of the advantages of centralised cash reserves.

The present position is that in all countries, whether they have central banks of remote or recent origin and whether they have prescribed minimum cash reserves or not, the commercial banks have grown accustomed to keeping with the central bank all their cash, except till money requirements. They regularly draw currency from the central bank as required for pay-roll or holiday purposes, and they pay in surplus currency, as it accumulates, in spite of their balances at the central bank being far in excess of customary or legal requirements[1] due to continuous favourable balances of payments or other factors. They have thus come to accept fully and unequivocally the position of the central bank as the custodian of their cash reserves. As will be explained later, this process was carried to its furthest point by the general suspension of the gold standard and the concentration of gold and exchange reserves in the central bank or, in some countries, in the Treasury or an exchange stabilization fund or control board.

With regard to the introduction of legal requirements in certain countries, there was at first a tendency to stress the advantages

[1] In the Union of South Africa, for example, the minimum reserve balances which the commercial banks had to maintain with the Reserve Bank amounted to £22,855,000 at 31st March, 1944, while their free or excess balances were £101,949,000; and in the United States the amounts of the minimum reserve and excess balances of the member banks with the Federal Reserve Banks in June, 1940, were $6,900,000,000 and $6,700,000,000 respectively

not only of increased safety and solvency but also of increased liquidity of the commercial banks as a direct result of their having to maintain minimum balances with the central bank. In due course, it came to be generally realised that the increased liquidity of the commercial banks was derived from the rediscount and lending facilities afforded by the central bank, and not from the holding of minimum reserve balances which as such were practically immobilised from the point of view of current operations. There is, however, a close connection between the two in the sense that the centralisation of cash reserves increases the scope and extent of the facilities which can be afforded by the central bank. The increase in liquidity is thus an indirect rather than a direct result of centralised cash reserves.

In recent years relatively more emphasis has been placed on the fact that the obligation imposed on commercial banks to keep minimum cash reserves in the central bank has given the latter a minimum amount of funds with which it can operate, and has not only strengthened its financial position but also given it some means of control over the banking and credit situation.

In the United States, the Committee on Bank Reserves[1] reported in 1931 that 'it is no longer the primary function of legal reserve requirements to assure or preserve the liquidity of the individual member bank', and that 'the two main functions of legal requirements for member bank reserves under our present banking structure are, first, to operate in the direction of sound credit conditions by exerting an influence on changes in the volume of bank credit, and, secondly, to provide the Federal Reserve Banks with sufficient resources to enable them to pursue an effective banking and credit policy'; and in England, where there are no statutory cash-reserve requirements, the Macmillan Committee[2] stated in the same year that 'the main reason for expecting the banks to keep reserves above the minimum needed for daily convenience is no longer primarily the safety and solvency of the banks themselves, as it was in former times, but the necessity for providing the Central Institution with adequate resources wherewith to manage the monetary system and safely furnish the member institutions with precisely those conveniences, for rapidly liquidating earning assets, upon which the latter depend when determining the amount of their cash reserves'.

Moreover, Gregory[3] drew attention to the fact that 'the ease

[1] Page 5 of Report
[2] Page 158 of Report
[3] *Gold, Unemployment and Capitalism*, p. 168

with which the central bank can affect the money market situation at any given moment will vary (in addition to other environmental conditions) . . . with the reserve requirements which are imposed by law or by custom upon the other banks', and in discussing the disparity between the imposition of legal cash-reserve minima in countries where central banking was relatively new and the absence of such minima in countries where central banking had already reached an advanced stage, the Midland Bank *Monthly Review*[1] commented that 'this disparity is partly to be explained by the desire to place new central banks in possession of sufficient funds to pay their way and perform their controlling functions'.

The greater measure of control which has been associated with centralisation of cash reserves, and particularly with statutory provisions for minimum reserves, has naturally induced several countries to explore ways and means of improving and facilitating that control This has already led (in such a variety of countries as the United States, Western Germany, Mexico, New Zealand, Sweden and Ecuador) to the monetary authorities being empowered to make changes in the minimum credit balances with the central bank to be maintained by the commercial banks, and further developments can be expected in due course.

With regard to the general implications of bankers' balances with the central bank, there are certain aspects which call for further explanation. There is, in the first place, the statement made on various occasions by some commercial bankers that, on account of the legal or moral obligation of commercial banks to maintain minimum balances with the central bank, the latter is morally obliged not to compete directly with them, since in doing so it will be using their own funds against them and can underquote them because of its paying no interest on their deposits.[2] This statement obviously requires qualification. The central bank's lending power is not dependent entirely or directly upon its bankers' deposits. It is true that at least part of the central bank's holding of gold and foreign exchange may be regarded as having come into its possession and remaining under its control because of the balances which the commercial banks keep with it, and that

[1] Issue of May-June, 1937

[2] Under the Commonwealth Bank Act of 1945, it was specifically provided that the accounts of the trading banks shall not be kept in the General Banking Division of the Commonwealth Bank, in order to 'remove any grounds for complaint that competitive activities may be conducted with funds deposited by the trading banks' (Explanatory Memorandum issued by Treasury)

in many countries the lending power of a central bank is limited by a statutory requirement of minimum gold or gold and foreign exchange reserves or by other means. Within this limit, however, the central bank also derives its lending capacity from its special power to create legal-tender money. In any case, the central bank's gold and exchange reserves were acquired from its issue of notes as well as from its bankers' deposits.

It must also be pointed out that the capacity of the central banks, through holding the cash reserves of the commercial banks, to compete with the latter is not as great as is commonly believed. Competition in the form of discounts and advances would tend to increase its liabilities without automatically adding to its reserves, and any such increase would in general tend to be reflected primarily in an increase in bankers' deposits with the central bank and, to a smaller extent, in the deposits of its private customers, and perhaps also in its note circulation. Whichever form it takes, it would represent an increase in potential claims against the central bank for gold under the gold standard, for gold exchange under the gold exchange standard, for sterling or dollars under the sterling or the dollar standard, or for foreign exchange generally. Thus, if such competition led to over-expansion of credit, which in turn brought about conditions causing a deterioration of the balance of trade position or an export of capital, the increased demand for foreign exchange would reduce not only the amount of the central bank's reserves but also its reserve ratio, as its liabilities would not automatically show a proportional reduction

Normally, the commercial banks also have some means of directly defending themselves against undue competition or an unfair attitude on the part of the central bank. Under the gold standard, for example, they could attack the reserve ratio of the central bank and weaken its structure by withdrawing their excess balances in gold, i.e. balances over and above those required for clearance purposes or for statutory minimum reserves. With the suspension of the gold standard they could not automatically withdraw their excess balances in gold, but in countries which did not impose exchange restrictions the banks could demand foreign exchange, if they were prepared to run the risk of exchange losses consequent upon the buying of exchange in excess of their current requirements while exchange rates were subject to fluctuations; and the conversion of balances into foreign exchange would have more or less the same effect on the central bank as conversion into

gold. It is only when exchange restrictions are in force and the central bank is thus not even obliged to convert its notes (and indirectly also its deposits) into foreign exchange, except for specified and approved purposes, and still more when gold and exchange reserves are by law or moral pressure concentrated in the central bank or other central body, that the commercial banks have no real alternative but to keep their surplus cash in the central bank. They can, of course, always withdraw their excess balances in notes, but apart from the inconvenience to the commercial banks as well as the central bank this would leave the total liabilities of the central bank unaltered, its deposit liabilities being reduced by the same amount by which its note liabilities are increased. With regard to exchange restrictions, many countries in Central and Eastern Europe and in South and Central America had already, prior to the outbreak of war in 1939, adopted such restrictions in one form or another as a result of disequilibrium in their balances of payments. During the war, however, strict exchange control was necessarily applied in almost every part of the world, accompanied in most cases by statutory concentration of all gold and exchange holdings in the central bank or the Treasury or a special exchange organisation. In such circumstances, the commercial banks were rendered fully subservient to the central banking and Governmental authorities.

Many countries have had to continue some form of exchange control after the war, and this is recognised by the provision in the Monetary Fund Agreement for a transition period during which member countries may impose exchange restrictions on current as well as capital transactions to the extent that they consider this to be necessary. In due course, under the Fund Agreement, a member country is required to carry out the obligation of convertibility of its currency into the currencies of other member countries, at least for current commercial and financial transactions; but it may in any case continue to apply such exchange restrictions to capital transactions as are considered necessary in its own interest. The assumption of convertibility into foreign exchange for current purposes with the right to control the export of capital as a matter of monetary and exchange policy, would in general make the position of the central bank much less vulnerable, and that of the commercial banks correspondingly more subservient, than under the gold standard or even under a 'free' managed currency (i.e. free of exchange restrictions). The position of the commercial banks under the

Fund plan would, however, be less subservient than under full exchange control, as the central bank would have at least to take account of the possible repercussions, on the demand for foreign exchange for current transactions, of the creation of central bank credit in dealings with the public.

In conclusion, it may be said that, for the attainment of positive results in the long run, the relationship between the central bank and the commercial banks must, as in the case of that between the central bank and the State, be based on free and full co-operation to their mutual advantage and that of the country as a whole and on the willing acceptance of moral obligations by both parties. In the common interest the commercial banks should keep their surplus cash with the central bank, while the latter has a moral obligation not to abuse the additional strength and power which it derives from its holding the commercial banks' cash reserves.

CHAPTER V

THE CENTRAL BANK AS THE CUSTODIAN OF THE NATION'S RESERVES OF INTERNATIONAL CURRENCY

Centralisation of Metallic Reserves. The central bank's function of holding the nation's metallic reserves (and, in many cases, also a large part of its foreign exchange reserves) was automatically derived from its functions as the bank of issue and the custodian of the commercial banks' cash reserves.

According as one bank obtained a complete or residuary monopoly of the note issue, and according as the use and circulation of note currency increased, the other banks had to hand over sufficient of their metallic reserves[1] to that bank in order to meet the growing demand for notes which they could not issue themselves. The metallic reserves of the commercial banks were also concentrated more and more in the bank of issue according as the latter came to be increasingly entrusted with the custody of their surplus cash and to develop into a central bank. In short, the central bank acquired its holding of metallic reserves and, in many cases, also of foreign exchange as a counterpart of its issue of notes and its custody of the commercial banks' surplus cash, the latter two functions being reflected in the liabilities of the central bank, and the former in its assets.[2]

It followed, therefore, that the more the central bank was called upon to function as bank of issue and custodian of bank reserves, the more the metallic reserves of the country were concentrated in the central bank. It was explained in the previous chapter that, for various reasons, all the surplus cash of the com-

[1] Gold or silver or gold and silver, depending upon the monetary standard and the legal requirements in force at the time

[2] The central bank's liabilities usually consist mainly of notes issued and bankers' deposits, and, to a smaller extent, of Government and other deposits, and such liabilities are brought into being either against the deposit of bullion, coin and foreign exchange, or against the creation of central bank credit in the form of discounts, advances and investments The banks do not, however, seek accommodation from the central bank in order to draw currency required in circulation or to maintain minimum cash reserves, when they have metallic reserves on which they do not earn interest or foreign exchange on which they earn less than they have to pay for the use of central bank credit.

mercial banks is now centralised in the central bank, whether such cash is far in excess of legal or customary requirements or not; and it was shown in Chapter II that, while as a result of the repercussions of World War I and the displacement of gold coin with notes there was already a considerable expansion of note issues between 1914 and 1929, the increase in the note circulation of all kinds of countries has been truly phenomenal since 1929, and particularly since the beginning of World War II. The concentration of gold reserves was further reinforced in recent times by the legal restrictions on the movement or holding of gold, which first accompanied the abandonment of the gold standard in many countries and subsequently, under war conditions and emergency regulations, were tightened up and extended almost all over the world also to dealings in foreign exchange. These developments virtually completed the centralisation of the gold reserves and, temporarily at least, also the exchange reserves of almost every country in the central bank or, in some cases, in the Treasury or a stabilisation or equalisation fund.

Maintenance of Monetary Standard. According as the sole or principal bank of issue assumed the custody of the commercial banks' cash reserves and of the nation's metallic reserves, it came also to accept the responsibility of safeguarding the value of the national currency and maintaining the monetary standard adopted by the State.

As the bank of issue, it had under the gold specie standard, for example, to redeem its notes in gold coin on demand, and it had, therefore, in any case to hold sufficient gold for the purpose of redeeming such notes as might be presented for payment from time to time. In due course, however, as was already forcibly brought to the attention of the Bank of England during the crises of 1847, 1857 and 1866, it was realised that currency and credit were closely related, and that the commercial banks relied upon their deposits with the bank of issue being also convertible into gold if and when required. The metallic reserves of the bank of issue thus came to be recognised as the basis of the entire banking system; and the formal acceptance by it of the responsibility of maintaining the monetary standard laid down by law or otherwise safeguarding the value of the national currency, was another essential link in the process of its evolution as a central bank.

Reserve Requirements. With a view to regulating note issues and safeguarding the convertibility of notes, minimum reserve requirements or other limitations were imposed by law on banks

of issue. In Chapter II details were given of five different methods evolved by legislators during the past hundred years in connection with the regulation of note issues.

As regards legal reserve requirements, there were two principal methods. The first was that of a partial fiduciary issue introduced in England in 1844, namely, a fixed amount laid down by law from time to time which need be covered only by Government securities, while all notes issued in excess of this amount must be fully covered by gold. This method was followed by England until the outbreak of war in September, 1939, when all the gold held in the issue department of the Bank of England was transferred to the Exchange Equalisation Account and the note issue as such became a total fiduciary issue, subject to a maximum limit prescribed by the Treasury from time to time. The system of a partial fiduciary issue was, in one way or another, adopted by such countries as Sweden, Norway and Finland; and it was also followed by Italy prior to 1926, and by Japan prior to 1941. Like England, Japan then switched over to a flexible maximum issue without any statutory requirement of a minimum reserve.

The second principal method was that of prescribing a minimum percentage gold reserve against the note issue, the remainder of the notes to be covered by certain specified assets, as well as a minimum reserve against the deposits of the central bank.[1] In total this method, which also provided formally for the temporary suspension of the full reserve requirements subject to certain conditions, was first introduced with the establishment of the Federal Reserve System in 1913. Germany had in 1875 adopted the principle of a proportional reserve, namely, a minimum reserve of one-third, but only against the note issue of the Reichsbank. Prior to 1913, statutory provision for metallic reserves against the deposit liabilities of the central bank had been made only in Holland and Belgium. The maintenance of minimum reserves against such liabilities in other countries was left to the judgment and discretion of the central bank. Germany, however, was the only country which previously had adopted the principle of formal provision for the suspension of the full reserve requirements, although it was applied in a different manner from that provided

[1] By applying the principle of the minimum reserve also to the deposits of the central bank, legal recognition was given to the fact that its deposits represented no less a liability than its notes, the former being convertible into the latter on demand, and that such deposits came more and more to serve as the credit base of the banking system.

for in the case of the Federal Reserve Banks.

The reserve provisions of the Federal Reserve Act of the United States (as amended up to 1917), which were described in detail in Chapter II, were incorporated in one form or another in the statutes of most of the many new central banks which were established thereafter, and were also adopted by France, Italy, Austria, Bulgaria and Greece when they reorganised their currency systems during the 'twenties. Even Germany decided, on the occasion of the reorganisation of the Reichsbank in 1924, to adopt the modifications previously introduced by the United States, with the exception of the minimum reserve against deposits.

Thus, by the end of the 'twenties the new system of reserve requirements for central banks introduced in the United States had spread over a large part of the world, and it was continuing to spread. There were, however, various modifications and deviations from the particular provisions of the Federal Reserve Act. In France, for example, no provision was made for the suspension of reserve requirements and the reserve against deposits as well as notes was to consist only of gold, whereas in the case of the Federal Reserve Banks the reserve against deposits could consist not only of gold bullion and gold coin but also other 'lawful money' (i.e. silver coin, silver certificates, 'Greenback' notes and national bank notes). In some countries the amount of silver coin admitted along with gold in the reserve to be held against deposits, or against notes and deposits, was limited. For example, in the Union of South Africa silver coin[1] was restricted to one-fifth of the minimum reserve against deposits, and in Peru and Mexico to one-tenth and one-fifth respectively of the minimum reserve against notes and deposits combined In many countries, moreover, the central bank was allowed to include foreign exchange along with gold in the minimum reserve against notes and deposits.

Furthermore, there were differences in respect of the reserve percentages. The Federal Reserve Banks had to maintain minimum reserves of 40 per cent against their note issues and 35 per cent. against their deposits, while most countries adopted the same percentage for deposits as for notes, namely, 33 1/3 per cent. in Bulgaria, 35 per cent. in France, Roumania and Yugoslavia, 40 per cent in Germany, Italy, Greece and Union of South Africa,

[1] In 1944, however, the provision for the inclusion of silver coin was eliminated from the new Act, and the reserve against deposits as in the case of notes had to consist only of gold

50 per cent in Chile and Peru, and 60 per cent. in Colombia.

Between 1930 and 1939 the minimum reserve ratios to be maintained by central banks were reduced in many countries. This was the result of, firstly, the severe depression of 1930-33 and the heavy loss of gold and foreign exchange suffered by most of these countries, secondly, the trend towards greater elasticity in monetary and banking policy; and thirdly, the recommendation made by the World Economic Conference of 1933 in favour of a 25 per cent. reserve ratio.

Thus, such countries as Czechoslovakia, Hungary, Bulgaria, Yugoslavia, Denmark, Mexico and Chile reduced the minimum reserve ratio to 25 per cent. In Ecuador the ratio was lowered to 25 per cent. in 1932 but was raised to 40 per cent. in 1935 and then lowered to 30 per cent in 1937; and in Colombia, while the reduced reserve against deposits was left at 25 per cent., that against notes was raised to 50 per cent at the end of 1938 Moreover, some of the central banks which were established after 1933, such as those of Canada, Argentina, New Zealand and Salvador, commenced operations under statutes requiring only a 25 per cent. reserve. Various other countries reduced their statutory reserves, e g. South Africa and Latvia to 30 per cent. Some countries also repealed the penal conditions attached to the temporary suspension of reserve requirements. Germany,[1] Italy, Greece, Peru and Bolivia, on the other hand, instead of reducing the reserve requirements, suspended such provisions indefinitely.

After the outbreak of war in 1939 France, and subsequently Canada, Denmark, Norway, Holland and Belgium, also formally suspended their reserve requirements, while in such countries as Bulgaria and Finland the central banks were permitted to include in their legal reserves all their foreign assets (including Reichsmark clearing balances) The suspension of the reserve provisions in England and Japan has already been referred to. These indefinite suspensions and relaxations of reserve requirements were resorted to for the purpose of meeting the actual or anticipated wartime increases in the note circulation, and/or with a view to transferring the gold reserves of the central bank to a State exchange organisation (as in England and Canada) or otherwise rendering gold

[1] Under the law of 1939 the question of reserve requirements was avoided by merely providing that 'gold and foreign exchange holdings, which are at the disposal of the Reichsbank, shall be admitted as note cover in addition to the cover specified' under another subsection, namely, fixed-interest securities, Treasury bills, commercial bills and cheques, and collateral loans In Japan the question of reserves was also evaded in a more or less similar manner in 1941

and exchange reserves available for meeting adverse balances of payments

The next changes in reserve requirements were the reduction, for the first time, in the minimum reserves to be maintained by the Federal Reserve Banks of the United States, namely, from 40 and 35 per cent. of their notes and deposits respectively to 25 per cent. of both their notes and deposits;[1] and the abolition of the former minimum reserve of 25 per cent. against the note issue of the Commonwealth Bank of Australia. In the United States, the lowering of the original reserve requirements in June, 1945, 'was occasioned by the rapid fall in the ratio of reserves to note and deposit liabilities in all Federal Reserve Banks during the past three years, which has resulted mainly from the financing of the war' and, to a smaller extent, from the decrease in their total reserves, 'reflecting cash payments to foreign countries for materials needed in the war and for the maintenance of United States troops abroad'. In short, the minimum reserve was lowered in order to have the 'assurance that the Federal Reserve Banks will be able to continue to give such support as is necessary to the financing of the war'.[2] In Australia, on the other hand, the reserve requirement was abolished in 1945 on the ground that there was no longer any need for an internal reserve, and that the whole of the Commonwealth Bank's reserve 'should be available for use as required to meet external commitments'.[3]

In Guatemala, the new law of December, 1945, also refrains from imposing a specific minimum reserve of gold and exchange to be held by the central bank, and provides that the Bank of Guatemala shall utilise its international reserves 'for the protection of the stability of the currency against temporary disequilibria in the balance of payments'. However, while no reserve requirement is specifically laid down, certain levels of international reserves are prescribed as criteria for particular purposes, e.g for determining when emergency measures are to be adopted, or how the Bank's exchange reserves may be invested from the point of view of liquidity, or whether the Bank may acquire Government or other first-class bonds in the domestic market. The main novel feature is that these levels of reserves, expressed

[1] The provision for the inclusion of 'lawful money' in the reserve against deposits was, however, repealed Such reserve was henceforth to consist only of gold, i e gold certificates, as in the case of the reserve against notes

[2] *Monthly Review of Federal Reserve Bank of New York*, July, 1945.

[3] Speech by Commonwealth Treasurer in Parliament on new Commonwealth Bank Bill.

in percentages, are related to the annual average of total sales of exchange during the three preceding years, rather than to the Bank's current note and deposit liabilities. This was done on the ground that, for a country like Guatemala, the level or trend of sales of foreign exchange affords a better guide for monetary and exchange policy than the level or trend of the central bank's domestic liabilities.

Since 1946 the trend in the direction of liberalization or abolition has continued. In the first place, all the countries which had suspended the reserve provisions for their central banks before or during the war, have not yet formally re-introduced reserve requirements. Furthermore, other countries, such as Sweden, Czechoslovakia, Argentina, New Zealand and Chile, have in the meantime abolished or suspended their reserve provisions. In New Zealand, for example, it is merely laid down that ' it shall be the duty of the Bank to maintain reserves which, in the opinion of the Board of Directors, will provide a reasonable margin for contingencies, after taking into account prospective receipts and disbursements of overseas funds, and having regard to the economic position within New Zealand'; while in Czechoslovakia the reserves are to be dependent upon the requirements of the balance of payments position. Likewise, the new Central Bank of Ceylon is required to maintain international reserves adequate to meet any foreseeable deficits in the balance of payments; and various criteria were laid down to which the Bank must have regard in judging the adequacy of the reserves, including estimates of the prospective receipts and payments of foreign exchange, the volume and maturity of the central bank's own liabilities in foreign exchange, and the volume and maturity of the foreign exchange assets and liabilities of the Government, banking institutions and other persons in Ceylon.

In South Africa, while the principle of a minimum gold-reserve ratio against the note and deposit liabilities of the central bank has been retained throughout, the reserve requirements were liberalized in two respects in October, 1948. In the first place, the legal reserve ratio which had been reduced from 40 to 30 per cent. in 1933, was lowered further to 25 per cent.; and secondly, the Reserve Bank was permitted to deduct the amount of its foreign assets from its liabilities to the public before calculating the reserve ratio. The latter measure was regarded as a logical one in the circumstances, because the Reserve Bank had relatively large holdings of sterling and other currencies which represented

the counterpart of an equivalent amount of its liabilities and which could be used at any time for making payments in the currencies concerned, whether on account of withdrawals of funds or settlements for goods and services.

While these various deviations from the old-fashioned systems of reserve requirements are interesting and logical methods or experiments in the prevailing circumstances and deserve further study, it can be said, in general, that the strong trend towards liberalization of the reserve provisions for central banks was part of the modern concept of flexible monetary management and improvisation, and of the desire to avoid strict discipline in monetary affairs.

Use of Foreign Exchange as a Legal or a Technical Reserve. Prior to World War I, little use had been made of foreign exchange as a direct and specific reserve against note issues. Up to that time it was only colonial territories such as Java, India, the Philippines and the Malay States, and countries like Mexico, Egypt and Panama, which had officially followed the one or other form of exchange standard. India, for example, abandoned the silver standard in 1893 in favour of a system under which its currency was redeemable either in gold or in drafts on London; and in the Philippines, under legislation introduced in 1903, reserves of United States currency had to be held in the form of balances or investments in New York as Philippine currency was redeemable in drafts on New York. In an informal manner Russia and Austria-Hungary also followed an exchange standard. Apart from these examples of exchange standards, the central banks of Sweden, Norway and Denmark were allowed, within limits, to include in the reserve against their note issues their net balances with each other, although their notes were legally redeemable only in gold. After that war, however, modified forms of the gold exchange standard came to be extensively adopted as a means of stabilising currencies and economising in the use of gold, and foreign exchange was admitted by law as part of the minimum reserve to be held by central banks in a large number and variety of other countries, such as Germany, Italy, Belgium, Austria, Hungary, Roumania, Poland, Bulgaria, Greece, Finland, Estonia, Chile, Colombia, Mexico, Argentina, Peru, Australia, India, Bolivia, Ecuador and Salvador. In some of these countries the amount of foreign exchange which could be included in the legal reserve was limited to a certain proportion of such reserve, varying from one-tenth to one-half, whereas in others the relative proportions of

gold and foreign exchange were left to the discretion of the central bank.

At first it was laid down by law or regulation that the admissible foreign exchange was to consist only of balances, bills and other specified assets payable in a gold currency, although in some cases New York and London were prescribed as the only eligible centres. On the suspension of gold payments by Great Britain and the depreciation of sterling in terms of gold, sterling was rendered ineligible as a reserve for central banks which had to continue maintaining a gold exchange standard, but a 'sterling area' came into being, comprising those countries which kept their currencies linked with sterling or subsequently decided to re-link with sterling at the old or a new parity and which, in many cases, formally adopted a 'sterling exchange standard', with sterling as the whole or part of the legal reserve. A 'dollar group' with a 'dollar exchange standard' also emerged from the confusion of fluctuating currencies. As regards the remaining countries which had previously followed a gold exchange standard, the foreign assets eligible for inclusion in the legal reserve were defined, after the general suspension of gold payments, as those payable in the principal banking centres of Europe and America, or in the leading world markets, or in currencies not subject to extraordinary fluctuations or not subject to restrictions in the countries concerned

Apart from the central banks which have, under the one or other form of exchange standard, held increasing amounts of foreign exchange as legal reserves, there has also been a growing tendency on the part of other central banks to participate in foreign exchange transactions and to hold foreign exchange, although not permitted to include it in their legal reserves. Even prior to World War I the central banks of such countries as Germany, Austria-Hungary, Holland and Belgium had regularly followed the practice of holding substantial amounts of foreign bills in their portfolios as a first line of defence for their currencies. Since that time, however, whatever monetary standards were in force, the central banks of most countries came, either as a natural development in credit and exchange control[1] or as an emergency measure, to play an increasingly important part in foreign exchange operations and to aim at maintaining balances and liquid investments in the centre or centres with which their countries had important commercial and financial relations. Their foreign assets,

[1] This will be discussed in Chapter XIV.

in addition to being a source of revenue, performed the functions of a 'buffer' or 'shock-absorber' and served as an instrument for the regulation of exchange rates, while their dealings in foreign exchange were also used as one of the means of regulating money-market conditions.

In many countries the central bank virtually became a central exchange bank, acquiring the surplus exchange which accrued from a favourable balance of payments and making up the short-fall which had to be met in the event of an unfavourable balance These central banks continued to perform this function after the abandonment of the gold standard, but usually for the profit or loss of the Government.

In Great Britain, on the other hand, the old principle of the Bank of England that direct participation in exchange transactions for its own account was not a proper sphere of activity for a central bank, and that the latter should exert its influence on exchange rates through its control of money-market and credit conditions and also, under the gold standard, through its redeeming its notes in gold, tended to persist, This was, no doubt, due mainly to the existence in London of a broad and active international money market and to sterling having been for so long the predominant international currency. After the abandonment of the gold standard in September, 1931, however, the Bank of England operated in the exchange market to some extent as a stablising factor until the Exchange Equalisation Account was established in July, 1952. It was then called upon to take a more active and controlling part in exchange operations in its capacity as agent of the Account, in addition to carrying out transactions for account of the many central banks which deal with the London exchange market through the Bank; and since the beginning of World War II it was entrusted, as the agent of the Treasury, with the rigid exchange control imposed under the defence (finance) regulations. Thus, except for a brief period prior to the establishment of the Exchange Equalisation Account, the Bank of England has not operated in the exchange market for its own account, and has not held foreign exchange as a legal or a secondary reserve.

In the United States and parts of Continental Europe, the central banks were generally inclined to follow a middle course. The Federal Reserve Bank of New York, for example, in spite of the development of the New York money market and the increasing use of the dollar as an international currency, operated

in the exchange market for its own account (as well as for central bank customers) and held foreign bills as a secondary reserve and as an aid to regulating exchange rates, until the gold standard was suspended in the United States in the beginning of 1933. Thereafter the Treasury, as in Great Britain and some other countries, assumed the responsibility of regulating foreign exchange, while using the machinery of the Federal Reserve Bank of New York for this purpose. At no time, however, did the Bank act as a central exchange bank, i.e. as a source from which commercial banks or exchange dealers could directly obtain foreign exchange in the event of a shortfall.

In recent years most central banks have, in one way or another, been called upon to undertake more intensive exchange control. In Central and Eastern Europe, Latin America and Asia, the repercussions of the great depression of 1930-33 caused the central banks to be granted wide powers for the purpose of controlling the exchange markets of their countries in accordance with instructions laid down by legislation or regulation; and for obvious reasons the outbreak of World War II rendered rigid exchange control necessary in belligerent countries generally, while the disruptions brought about by the war also necessitated control in neutral countries.

The question of exchange control will again be referred to in later chapters The point to be established here is merely that most central banks will, directly or indirectly and as a matter of general policy and financial control or because of necessity, continue to play an important part in foreign exchange operations and to aim at maintaining substantial amounts of foreign exchange as a first line of defence for their currencies, whether such foreign exchange is admissible as part of the legal reserve or not.

Provision for Temporary Suspension of Reserve Requirements. It was previously stated that the Federal Reserve Act of the United States contained a formal provision for the temporary suspension, subject to certain conditions, of the full reserve requirements against the note issues of the Federal Reserve Banks, and that this provision, along with the principle of a proportional reserve, was incorporated in the statutes of most of the many new central banks which were established thereafter and was also adopted in the case of several of the older central banks.

The usual form of this legal provision was that the central bank could, with the consent of the Treasury (or of the Federal Reserve Board in the United States), let the reserve against its

note issue[1] fall below the legal minimum for thirty days, with renewals for periods of fifteen days each, but subject to the payment by the central bank of a graduated percentage tax on the amount of the shortfall in the reserve and to the raising of their discount and interest rates at least by the percentage of the tax to be so paid. The motive underlying this formal provision for temporary suspension of reserve requirements against notes was to introduce additional elasticity into the monetary system and to increase the central bank's capacity to cope with such emergencies as might arise, for example, from the loss of gold and foreign exchange owing to an unfavourable turn in the balance of payments or from an inadequate domestic supply of money; and the conditions attached thereto were designed, firstly, to deprive the central bank by a special tax of any incentive to follow a policy of undue expansion, and, secondly, to compel the central bank, through increases in its discount and interest rates, to aim at credit contraction and economic readjustment where necessary for the purpose of remedying the deficiency in its reserve.

During the depression of 1930-33, many of the central banks concerned either found themselves seriously embarrassed by these conditions or anticipated being embarrassed by them in due course. In particular, the provision for the raising of discount and interest rates was found to be unduly rigid in its application, since in certain circumstances it necessitated the central bank raising its rates to a level fraught with great danger to the national economic interest. In a number of countries the issue was avoided by lowering their reserve requirements and/or by revaluing the reserves according as their currencies depreciated and/or by admitting temporarily the inclusion of certain other assets in the legal reserves, while a few indefinitely suspended the reserve requirements or allowed them to be disregarded.

In South Africa, on the other hand, the conditions relating to the payment of a graduated tax and the raising of discount and interest rates were abolished by an amendment of the law in 1932. This was also done by amending legislation in 1936 in the case of the Reserve Bank of New Zealand and the National Bank of Bulgaria; and when the Bank of Canada Act was passed in 1934, it gave the Bank the power to suspend reserve requirements

[1] I e after deducting the minimum reserve to be maintained against its deposit liabilities, in those cases where the proportional reserve requirements applied to deposits as well as notes

with the consent of the Government, without any liability in respect of taxation or any obligation to raise its rates. With regard to the United States, although the conditions attaching to the suspension of reserve requirements were retained in the Federal Reserve Act, it was provided under special legislation in 1933 that those conditions were not to apply when the suspension was necessitated by reason of open-market operations or direct purchases of Treasury bills or other Government obligations undertaken by the Federal Reserve Banks, at the request of the Treasury, for the expansion of credit in an economic emergency or in other specified circumstances.

Purposes of Gold and Exchange Reserves. The obvious purpose of a central bank holding gold and foreign exchange would appear to be that of having at its disposal a reserve of international currency, with a view to meeting at any time an adverse balance of payments and maintaining the external value of its currency. To the extent, however, that a central bank is required by law to maintain a minimum reserve against its note issue or against both its note and deposit liabilities, its holding of gold and foreign exchange is immobilised and not available for the purpose of balancing international accounts. The existence of a reserve requirement, therefore, virtually renders it necessary for a central bank to hold two different kinds of reserves, the one an internal or impounded reserve (i.e. against the domestic monetary circulation) and the other an external or free reserve (i.e. freely available for active use as international currency).

The immobilisation of the internal reserve as the result of a legal minimum requirement has indeed been lessened by the provision, in many countries, for temporary suspension of the full reserve requirement. Such suspension does make at least a part of the internal reserve available for external payments in an emergency, although in some countries there are still unduly onerous conditions attached thereto. Apart from the release of reserves during such a suspension, there is an automatic release of gold and foreign exchange from the internal reserve according as a reduction is brought about in those liabilities of the central bank against which a minimum reserve must be maintained. An adverse balance of payments causes a need for gold and exchange as international currency for the settling of external obligations, but in the absence of new credit creation it also causes an automatic reduction in the central bank's liabilities; and to release still more of the reserve its liabilities can, of course, be further reduced by a

deliberate policy of credit contraction. In addition, the lowering of the reserve requirement and the upward revaluation of the reserve, as a result of currency depreciation, serve to release some of the gold and foreign exchange previously included in the minimum reserve, at least to the extent that it is not required as reserve against an increasing volume of notes in circulation or of notes and deposits of the central bank.

All these methods of releasing part of the internal reserve for external payments have been adopted in the past by various countries and in varying degrees depending upon circumstances. In short, they have adopted these methods of meeting a deficiency in the legal reserve rather than throw the system of minimum reserves overboard. What then are the factors underlying the maintenance and continuance of the system of legal minimum reserves in these countries,[1] in spite of the fact that it largely immobilises such reserves from the viewpoint of their function as international currency?

The principal purposes which the minimum reserve requirement was designed to serve were those of maintaining confidence in the currency at home as well as abroad and setting a limit to the expansion of credit. In discussing the evolution of the different methods of regulating note issues, it was shown in Chapter II that, although changes and adjustments were made from time to time and in various ways in order to meet the need for increased elasticity in the monetary circulation, care was usually taken by legislators, as far as circumstances permitted, to avoid unduly weakening the security of note issues and shaking public confidence, or facilitating the creation of unsound economic conditions.

The conception of adequate security for the note circulation was historically and psychologically associated with adequate metallic cover, but the proportion of metallic cover which was considered adequate tended to decline. The limited or unlimited inclusion of foreign exchange in the legal reserves of many countries in recent times was in turn associated with its convertibility into gold or, in any case, with its more or less similar function as foreign purchasing power. While the psychological background was undoubtedly an important factor in the development and maintenance of the system of minimum reserves, there

[1] United States, Switzerland, Portugal, Ireland, India, Pakistan, Indonesia, Burma, Union of South Africa, Egypt, Mexico, Colombia, Uruguay, Venezuela, Ecuador, Salvador and Ethiopia.

was and still is also an economic basis for confidence in a currency which has a substantial minimum backing of international currency.

This does not imply that a currency with little or no direct and specific backing of gold and foreign exchange is, or should always be, subject to mistrust and liable to depreciation relative to other currencies. The country concerned may have concentrated its gold and exchange reserves in a State exchange organisation instead of in the central bank, and may thus have a substantial indirect backing for its currency; or, as in the case of a creditor country, the net foreign assets of its nationals may, although in a more remote sense, be regarded as an indirect reserve, or at least as an ultimate reserve. Moreover, a currency may, even in the absence of direct or indirect backing of gold or foreign exchange, continue to enjoy the confidence of the public because of faith in a strong Government or in the productive capacity of the country or in the maintenance of equilibrium in the country's balance of payments with or without exchange control.

It cannot, however, be denied that a direct backing of assets which constitute international purchasing power does represent, from the point of view of the public, a more intelligible and acceptable cover than an indirect backing of such assets held by an exchange fund, and certainly a more tangible and relevant cover than an ultimate reserve of foreign assets held outside the central bank and the Treasury; that gold and liquid foreign assets freely convertible into other currencies represent a more suitable reserve than non-liquid foreign assets or liquid foreign assets with restricted convertibility; and that the existence of a substantial minimum reserve is much to be preferred to a neglible reserve or none at all. Although as a legal minimum it is immobilised for immediate use, it is nevertheless in hand and available when the worst happens.

The foregoing arguments refer rather to the desirability of acquiring and maintaining an adequate reserve of international currency for use in an emergency, than to any need for prescribing a legal minimum reserve. The absence of a legal minimum does at least have the advantage of making the reserve fulfil its function as such more fully and freely; and it should not detract from the general purpose of a reserve to maintain confidence in the currency, provided the currency is backed by a reserve which, in the opinion of the public, is more or less adequate to tide the country over a crisis. The main point to be established here is that, whether a

minimum reserve is prescribed by law or not, a currency which has at its disposal a substantial reserve of gold and liquid foreign assets, as a buffer against an adverse balance of payments, is prima facie in a stronger and sounder position than one which has as collateral cover only domestic securities, bills and advances. Such domestic assets can in any case not be utilised for the settlement of international accounts. In other words, they may represent suitable collateral cover from the point of view of adjustments in the internal monetary circulation, but they cannot fulfil the function of a reserve for the purpose of maintaining the external value of the currency.

The case for a legal minimum reserve really rests on its ultimate function of compelling the central bank to aim at maintaining such reserve, and thus of setting a limit to the expansion of currency and credit and the development of unsound economic conditions. It is in a sense an anti-expansionist device, although not with the deliberate intention of countering legitimate expansion of production and trade. It is true that on various occasions in the past the strict maintenance of minimum reserves did have the effect of enforcing unwarranted deflation, but this was the result rather of undue rigidity of technique and policy than of the principle of the legal minimum. The restrictionist function of the legal minimum, particularly under the gold standard, was aimed at preventing over-expansion of credit with a view to avoiding price inflation, excessive speculation, over-production, unbalanced production, and disequilibrium in the balance of payments. The expansion of credit may not only have domestic repercussions, but also a direct bearing on the external position of a country in that it may bring about an adverse balance of payments through a relatively increased demand for foreign exchange. If all countries followed an expansionist policy in more or less the same degree, the relative position of countries might not be affected; but there would still be the danger of general disequilibrium and of expansion which could not be maintained and which might thus be followed by contraction and all the disturbances and dislocations associated therewith.

As a general restraining influence and a disciplinary instrument, therefore, a minimum reserve has a useful economic function to fulfil, provided it is not too rigidly administered and provided international co-operation in monetary management and policy accompanied, where necessary, by concerted action in the adjustment of minimum reserve requirements is satisfactorily achieved.

Since the suspension of the gold standard, the so-called reserve ratio policy has not been strictly adhered to in most countries, and a rigid observance thereof is not contemplated in the future, while under the International Monetary Fund a large measure of international collaboration and co-operation is implied. The need and scope for restraint and discipline, combined with elasticity, in monetary affairs will be further discussed in subsequent chapters.

General Observations. It was shown that, with a view to regulating the note issue and safeguarding the value of the currency, the central bank was almost everywhere required to maintain minimum reserves against its note issue or, as became more general during the 'twenties, against both its note and deposit liabilities; that, as a means of economising in the use of gold and promoting the stabilisation of currencies after World War I, foreign exchange came to be admitted along with gold as part of the legal minimum reserve to be held by the central bank in a large number and variety of countries; that, in order to introduce greater elasticity into the monetary system, provision was made in many countries for temporary suspension of the full reserve requirements; that, under the stress of the great depression of 1930-33, minimum reserve requirements were reduced in many countries as a further means of promoting elasticity, while in Germany, Italy, Greece, Peru and Bolivia the reserve provisions were indefinitely suspended; that during World War II the indefinite suspension of reserve requirements was also resorted to by England, France, Japan, Canada, Belgium, Norway, Holland and Denmark, for the purpose of meeting the actual or anticipated wartime increases in the note circulation and/or with a view to rendering gold and exchange reserves available for meeting adverse balances of payments; and that since 1945 reserve requirements have also been abolished or suspended in Australia, Sweden, Czechoslovakia, Argentina, Chile and New Zealand.

Thus, notwithstanding the general abandonment of the gold standard and the highly abnormal conditions created by the war, the present position is that many countries still adhere to the principle of a minimum reserve of gold or gold and foreign exchange to be held by the central bank. The retention by these countries of the system of minimum reserves, in spite of the fact that it largely immobilises such reserves from the viewpoint of their logical function as international currency, shows that they still have some regard for the original purposes which reserve requirements were designed to serve, namely, those of maintaining

confidence in the currency and setting a limit to the expansion of credit.

The conclusion was drawn that, even under modern conditions, a legal minimum reserve has a useful economic function to fulfil as a general restraining influence and a disciplinary instrument, provided it is not too rigidly administered. Increased elasticity has already been introduced in many countries through the medium of a lowering and/or relaxation of reserve requirements as well as formal provision for the suspension of the full requirements in an emergency; and further elasticity is provided for by the Monetary Fund Agreement, not only in the form of international collaboration and co-operation in monetary management and policy, but also by way of the credit facilities which, within the prescribed annual and total limits, would represent a potential addition to the foreign exchange resources of any member country. Technically there is, if anything, too much rather than too little scope for monetary elasticity. The remaining problem is that of attaining, subject to a minimum of restraint and discipline imposed by minimum reserves, the appropriate flexibility in national and international monetary management.

With regard to the amount of 'free' reserve (i.e. over and above the legal minimum) which the central bank should aim at maintaining in normal times, in order to provide for emergencies and to secure a substantial measure of freedom and elasticity in monetary policy, no hard and fast rule can be laid down. Countries differ greatly in regard to the stage of economic development, the type of economy, the set-up of the monetary and banking structure, and the temperament and habits of the population. Thus, as between one country and another there are considerable variations in the possible repercussions, on their balance of payments and their reserves, of such factors as world cyclical changes in business activity, bad harvests, international political complications, disturbances in international investment, and intermittent lack of confidence in the national currency.

Some countries are particularly vulnerable, on account of their undue dependence on a few export commodities subject to rapid and considerable price changes and also because of intermittent disturbances in the inflow of capital. Examples of such countries are Brazil, Argentina, Australia, New Zealand, Egypt, Chile and Colombia. It was in order to meet 'the periodic or exceptional requirements' of such countries that the Monetary Fund was empowered to waive temporarily the prescribed limits for facilities

to member countries 'with a record of avoiding large or continuous use of the Fund's resources'. The need for these countries to build up substantial reserves in prosperous times is reflected, for example, in the statute of the Central Bank of Argentina, in which the object of the Bank is stated to be, *inter alia*, 'to concentrate sufficient reserves to moderate the consequences of fluctuations in exports and investments of foreign capital, on currency, credit and commercial activity, in order to maintain the value of the currency'.

Other causes of vulnerability in the past have been the existence of an international money market and a large volume of foreign short-term funds which may be withdrawn at any time, as in the case of Great Britain and the United States, or intermittent political instability and the consequent disturbance of confidence in the exchange value of the national currency, as in the case of France. London and New York have a special position and responsibility as international financial centres and as custodians of the balances and investments of the large number of central banks which hold sterling and dollars as part of their legal or technical reserves or as a stock-in-trade. For this reason alone, the British and United States authorities ordinarily require to hold substantial gold and exchange reserves. Moreover, at various times London and New York have served as the repositories of fugitive capital and been subject to the sudden withdrawal of such capital.

The vulnerability of London as the custodian of central banking reserves and the repository of fugitive capital has been counteracted by stringent exchange control since its introduction in 1939; and with the maintenance of exchange control in respect of capital transactions which is sanctioned by the Monetary Fund Agreement, its financial position will continue to be much less vulnerable than before the war. The relatively large gold reserves of the United States, on the other hand, will enable New York to continue to function as an international financial centre without formal exchange control. As in the case of Great Britain, control of capital transfers will also considerably reduce the vulnerability of countries like France.

In general, the increased monetary elasticity derived from past or future adjustments of legal reserve provisions and the credit facilities of the Monetary Fund, as well as the reduced vulnerability of a country's monetary and exchange position under a system of control of capital transfers, will give the central bank greater freedom in the carrying out of a monetary policy aimed at economic stability.

CHAPTER VI

THE CENTRAL BANK AS THE BANK OF REDISCOUNT AND THE LENDER OF LAST RESORT

Introduction. Like the custody of bank reserves, the functions of rediscount and lender of last resort developed out of the special position of the bank which was granted the complete or residual monopoly of note issue in its country and whose notes enjoyed the privilege of being legal tender. The centralisation of metallic reserves in such a bank of issue further increased its capacity to create credit, and thus to rediscount and act as lender of last resort. These interconnected functions were, in fact, essential features in the development of such banks into full central banks.

The function of lender of last resort was historically associated with that of rediscount, since it was through the latter function that the former came to be fulfilled. The rediscount function, however, preceded that of lender of last resort, while in many countries it has remained the custom for the central bank to rediscount for individual banks as a matter of convenience to them, at any time, and not only when they had exhausted all other available sources and methods for the replenishment of their funds. The central bank may also be regarded as performing the function of lender of last resort when it is called upon to grant accommodation to the Government or to the public in times of monetary stringency; and by buying securities or bills of exchange in the open market and making more credit available at such times on its own initiative, it can eliminate or reduce the need for rediscount by banks and other financial institutions. The functions of rediscount and lender of last resort do not, therefore, always represent one and the same thing, but for reasons of general convenience and their historical association they can best be treated in the same chapter.

Origin and Scope of Rediscount. Originally the term 'rediscount' applied only to trade bills brought to the central bank by commercial banks, discount houses or bill brokers who were temporarily in need of funds and could not supplement their cash in

any other manner, or at least not in more convenient or advantageous ways, than by rediscounting bills with the central bank.

In former days the bill of exchange was extensively used as a means of financing both domestic and foreign trade. It was to the banks a safe, self-liquidating asset which served, together with call loans to the money market, as a secondary cash reserve. Its liquidity was enhanced by the development of discount markets in London and several other centres, as well as by the existence of central banks which assumed the function of rediscounting such bills when called upon to do so, subject to certain conditions and terms. In these circumstances the older central banks, as a matter of general credit policy, adopted the practice of granting accommodation to banks or other financial institutions only in the form of rediscounting trade bills or other self-liquidating paper, and laid down relatively stringent conditions regarding the quality and maturity of the paper eligible for rediscount. It was only in an emergency that the restrictions were relaxed. The underlying principle of this practice, which was first given some definite shape by the Bank of England about 1830, was that if the central bank normally dealt only in prime, self-liquidating paper based on goods in various stages of production and distribution, it would tend to give such paper special attraction and to set up a relatively high standard of elasticity and security requirements for banks as well as operators in the discount market, where there was one.

The real object of rediscount by the central bank was that no sound and genuine business transaction should be restricted or abandoned merely on account of a shortage of bank cash, and it was originally considered that, as such transactions would or could ordinarily be represented by bills of exchange, it would be sufficient and appropriate if rediscounting were confined to genuine bills of a total currency corresponding more or less with the time taken to complete the transaction. In the narrower sense, therefore, Willis[1] was justified in saying that 'when rediscount occurs . . . the operation performed by the central bank is essentially that of dealing in pure credit'.

Prior to 1914, the Bank of England and some of the central banks of Continental Europe regularly followed the policy of rediscounting only trade bills of relatively short maturity, except in cases of emergency when their requirements were temporarily toned down to meet the demand for accommodation. This was

[1] *Theory and Practice of Central Banking* (Harper), p. 116.

also the case with the Federal Reserve Banks when they commenced operations in 1914, since their powers of rediscounting were severely restricted under the original Federal Reserve Act. During the war of 1914-18 and the post-war period, however, the abnormal conditions compelled all central banks to relinquish some of the restrictions and to widen the basis of rediscounts as well as of collateral loans, or, where legal restrictions had been imposed on rediscounts and loans, their powers were enlarged by amendments to their statutes. Under these conditions central banks increasingly granted accommodation to commercial banks, discount houses and bill brokers also in the form of rediscounts of Treasury bills and loans against Government securities.

Subsequently the wider basis of rediscounts and collateral loans tended to remain, not only on account of the enormous expansion of the credit structure caused by war debts, but also because of changes in the methods of financing trade and in the structure of the money market There was a growing tendency towards commercial credits on open account and bank advances on current account,[1] as a result of which the bill came to be used less and less in domestic trade; and owing to the increased financing of foreign trade by means of bank advances and settlements with sight drafts or telegraphic remittances, in addition to the contraction of international trade on account of tariff and exchange restrictions, the foreign bill also came to be employed on a declining scale. On the other hand, with the increased debts and expenditures of Governments a larger use was made of Treasury bills, and commercial banks increasingly adopted Treasury bills as a secondary reserve, in view of the fact that this kind of credit instrument was also eligible for rediscount with the central bank and that it came to surpass the ordinary trade bill[2] and the bankers' bill in the discount market.

In these circumstances the supply of bills of exchange no longer

[1] According to the *League of Nations' Monetary Review of 1938-39* (p 111), 'the development of the overdraft has been due partly to a general demand on the part of various trades that the buyer should make arrangements with a bank instead of giving a bill, and partly to a desire of the debtor to save the interest on the whole currency of the bill by paying only for a debit balance which may fluctuate from day to day', and as additional reasons for the general decline in the use of the bill are mentioned 'increased self-financing by industry' and 'the tendency towards the elimination of the wholesale merchant as intermediary, through the process of the integration of trade and industry'

[2] In the United States an extensive use is made of promissory notes which are discounted by the banks and are also negotiated in the discount market. These promissory notes, which mostly have only the name of the maker thereon, are known there as 'commercial paper', in contrast to the genuine trade bills which are called 'trade acceptances'.

served as an adequate basis for obtaining central bank credit, and rediscounting in the strict sense was increasingly applied to Treasury bills. Moreover, there was a growing tendency on the part of banks and operators in the discount market to seek accommodation from the central bank in the form of short-term collateral loans rather than rediscounts. The reason for this was that such accommodation was frequently required only for some days over a month-end or year-end or a holiday period, and that a loan involved less work and inconvenience for both borrower and lender, particularly in the case of loans against long-term Government securities which could be left in the custody of the central bank for that purpose. Furthermore, in several countries other credit institutions than commercial banks and discount houses came to borrow directly from the central bank at times.

As a result of these developments, such accommodation as has been extended by most central banks to commercial banks, discount houses and other credit institutions has increasingly taken the form of loans against eligible bills of exchange and promissory notes, Treasury bills and Government or other gilt-edged securities, as compared with formal rediscounts of eligible paper. For this reason it has become necessary to use the term 'rediscount' in a broader sense, i.e. embracing all forms of central bank accommodation to such institutions. In this sense, rediscounts constitute an entity distinct from advances to the Government (central or provincial), and also from discounts or advances to the general public in countries where direct dealings with the public are still undertaken by the central bank.

In Great Britain the process of rediscounting has been indirect in the sense that it became the custom for the banks to call up their loans to the discount market rather than rediscount with the Bank of England themselves, thus leaving it to the discount houses and bill brokers to seek accommodation from the central bank in times of monetary stringency. From this point of view, the London discount market served as a link between the Bank of England and the commercial banks. During World War II, however, circumstances caused the traditional barrier between the Bank and the other banks to be set aside. A new open-market technique[1] was developed which 'allowed direct operations in bills between banks and the Bank of England and wholly by-passed the discount market'[2], and which virtually superseded the

[1] This will be dealt with in Chapter XI under the section on 'Open-Market Operations in Great Britain'

[2] *Economist* of 19th July, 1941.

old rediscount procedure until the end of 1951.

In all other countries, the more general procedure of rediscounting is for the commercial banks to rediscount directly with the central bank,[1] although the latter is also prepared to rediscount for operators in the discount market where there is one, as in the United States, France, Germany, Holland, Sweden and Switzerland, and for special credit institutions which prefer, or are compelled by circumstances, to obtain accommodation directly from the central bank. In the United States, however, the operations between the bill market and the central bank are not referred to as rediscounts, but as sales of acceptances to a Federal Reserve Bank at the latter's buying rate for such paper.

Function of Lender of Last Resort. The central bank's function of lender of last resort developed out of the rediscount function and was primarily associated with the latter. It implied the assumption of the responsibility of meeting, directly or indirectly, all reasonable demands for accommodation from commercial banks, discount houses and other credit institutions, subject to certain terms and conditions which constitute the discount-rate policy of the central bank.[2]

According to Hawtrey,[3] the Bank of England did not easily or willingly assume the responsibilities of the lender of last resort and was at the end of the eighteenth century found to give accommodation grudgingly. Thus, while the Bank performed the function of rediscount, it was prepared to do so only to a limited extent. It was only by a gradual process that the tradition that 'the Bank should never refuse to accommodate any eligible borrower became established'. In the crises of 1847 and 1857 the Government had to exercise some pressure on the Bank, and to encourage the latter to lend freely it promised legislation indemnifying the Bank if as a result thereof it failed to comply with the gold cover provisions of the Bank Act. In the crisis of 1866 'the Bank took the initiative in approaching the Government' and 'accepted the responsibility of unstinted lending'. Even after 1866, however, there was still some lingering doubt in the minds of the Bank's directors as to the full extent of the Bank's duties in this respect.

[1] In several countries rediscounting was undertaken, before there was a recognised central bank, either by a State commercial bank, as in Australia and Argentina; or by the Treasury, as in Canada; or by city banks on behalf of country banks with which they had a correspondent relationship, as in the United States.

[2] See Chapters IX and X.

[3] *Art of Central Banking*, pp. 119-125.

It was only after the publication of Bagehot's *Lombard Street*, in 1873, that the responsibilities of the Bank of England as the lender of last resort were 'unequivocally recognized'[1]; and it was Bagehot himself who coined the expression 'lender of last resort'. After its final recognition by the Bank of England, this function was also assumed by similar banks of issue in other countries, and it came to be regarded as a *sine qua non* of central banking. It was thus automatically accepted by the many new central banks which were established in the twentieth century. There was, for example, no argument about it when the Federal Reserve Banks were established in the United States. Moreover, within its first two years the South African Reserve Bank was called upon to face the responsibilities of lender of last resort when one of the biggest banks became involved in serious difficulties, and it did so unflinchingly and successfully.

Significance of Rediscount. The real significance of rediscount (in the broader sense) lies in the fact that it increases the elasticity and liquidity of the entire credit structure. It provides the commercial banks and other credit institutions with additional or alternative means[2] for the conversion of certain of their earning assets into cash, when their cash reserves are adversely affected and tend to fall below the statutory or traditional minimum, or when they find it necessary or desirable to increase their cash resources for the one or other purpose. It serves, therefore, to assure them that, to the extent that they have suitable paper to offer to the central bank for rediscounts or collateral loans, they can maintain their liquidity and thus their ability to meet withdrawals of deposits or legitimate demands for domestic accommodation or foreign exchange, even in the event of a crisis which virtually brought about a freezing of the discount and security markets.

While the credit-creating capacity of the central bank is not unlimited, being governed in the long run by such factors as the gold and exchange reserves and the balance of payments of the country, it is nevertheless a fact that the central bank, on account of its sole right of note issue and its custody of the banks' cash reserves, has a considerable capacity to extend accommodation at any particular time. The privilege of issuing legal-tender notes enables the central bank to meet heavy demands for currency, and

[1] Hawtrey, op cit., p 126.

[2] I.e. apart from and in contrast to the realisation of bills and securities in the open market or the sale of foreign exchange to the central bank.

the centralisation of bank reserves gives it greater lending powers generally.

In general, the provision of rediscount facilities by the central bank promotes economy in the use of bank cash and makes it possible for the banks individually as well as collectively to conduct their business with smaller cash reserves than if they were to depend only on their own resources and on such money-market facilities as were available.

At certain times of the year or of the business cycle, there is a heavy strain on the cash reserves of the banks. For example, at the month-end, currency is drawn for monthly pay-rolls or monthly debt settlements which may coincide with the weekly wage payments or a holiday season, while at the end of the year or half-year or quarter these currency withdrawals coincide with tax or other payments which result in at least a temporary flow of funds from the commercial banks to the central bank as the Government's banker. In countries where agriculture plays a relatively important part, the strain on the banks is increased during the principal harvesting and crop-moving seasons when increased cash payments are made; and it is still further increased in times of intense business activity owing to larger pay-rolls and the expansion of bank credit and deposit liabilities. Moreover, the highly strained cash position as a result of a combination of these factors at any time will be aggravated by an adverse turn in the country's balance of payments. Apart from these factors which tend to affect the cash ratio of all commercial banks, the individual bank has always to reckon with the possibility of a sudden loss of cash due to large debit balances in the inter-bank clearings.

In the absence of a central bank, therefore, each of the commercial banks would have to aim at carrying substantial cash reserves to meet such emergencies, whereas with a central bank to fall back upon in case of need a smaller cash holding would suffice. Where there are organised money markets, and particularly where there are international money markets (as in London and New York), the banks ordinarily have wider scope for the conversion of assets into cash. There are, however, times when the money market as a whole is strained, and it is at such times that the central bank can be called upon to perform, directly or indirectly, its function of lender of last resort. The full acceptance of this responsibility by the central bank works, other things being equal, in the direction of encouraging the commercial banks to maintain relatively stable cash ratios; and this is of great import-

ance to the central bank in performing its general function of credit control.

It is essential, on the other hand, that the increased elasticity and liquidity which rediscounting by the central bank affords to the credit structure, should not be abused. For example, banks should not attempt to economise in cash reserves to such an extent that, even in times of average or normal business activity, they require accommodation from the central bank during a large part of the year. Otherwise, it would be tantamount to their using rediscounts as permanent capital, and they would not have much in hand for meeting abnormal demands and conditions. Moreover, the central bank itself should aim at maintaining a position of great strength and liquidity in normal times in order not only to cope with unusual seasonal demands for credit, but also to deal effectively with emergencies and periods of general financial strain. Thus, while the central bank should have wide rediscounting and lending powers, it should in normal times be restrictive rather than liberal in its qualitative requirements as to bills eligible for rediscounts and loans, so that a safe margin would be available for abnormal times.

Finally, it must be emphasised that, while a central bank should definitely regard it as an important part of its duty to help banks in distress and act as lender of last resort, this does not imply that banks have an irrevocable right to unlimited accommodation from the central bank under all circumstances In the United States, for example, where this question has been debated and analysed more intensively than anywhere else owing to the existence of thousands of independent unit banks, it has been laid down that, 'in extending credit accommodation to a member bank, the Federal Reserve bank is required to consider the general character and amount of the loans and investments of the member bank and whether it has been extending an undue amount of credit for the speculative carrying of or trading in securities, real estate, or commodities or for any purpose inconsistent with the maintenance of sound credit conditions'; and it has been explained officially that 'under the law a bank is not entitled to credit from a Federal Reserve bank merely because it has eligible and acceptable paper, if the conduct of the bank's business has been such as to endanger its depositors or to promote the development of unsound credit conditions'[1].

[1] *Federal Reserve Bulletin*, October, 1937, p 977 This statement of policy clearly implies the use of rediscounting as a means of applying qualitative control of credit. See section on 'Direct Action' in Chapter XIII

In general, where a commercial bank is found to be merely in a state of technical insolvency in the sense that it has too many frozen assets due to general emergency conditions, but with a good chance of being successfully tided over the difficult period by assistance from the central bank, there is no doubt as to the attitude which the latter should adopt, particularly as the failure of one bank might tend to weaken the position of the other banks. Where, however, a bank has continued to follow clearly unsound practices despite warnings from the central bank, the latter cannot be expected to run the risk of heavy loss to itself in trying to bolster up a failing bank. The central bank must also bear in mind that, by rendering assistance to a failing bank and acquiring all its liquid and sound assets, preference would be granted to certain creditors at the expense of others who would find only frozen and bad assets left to meet their claims.

In the long run, no hard and fast rule can be laid down, each case having to be treated on its merits by the central bank after due consideration of all the factors involved; and frequently it will be a matter of choosing the lesser of two evils.

Rediscounting and Lending Powers. In the case of the Bank of England, no restrictions were imposed under its charter on its powers of rediscounting bills or making collateral advances. When it began to assume the responsibilities of lender of last resort, however, it decided to follow a policy of restricting its rediscounts and advances to certain types of paper only, and varying its rate of discount according to the demand for currency or credit, the state of business activity and the balance of payments In due course this practice became a tradition and was followed by other countries where central banks came into being, with some modifications depending upon local conditions, until it was generally recognized as an essential feature of central banks that they should deal in certain types of paper only, that their rediscounts and advances should not extend beyond a certain period, and that they should not make unsecured advances.

The charters or laws[1] of all the other central banks imposed varying restrictions on their rediscounting and lending powers, but the older central banks generally enjoyed wider powers than were found to be necessary prior to World War I.

The Bank of France, for example, was empowered to discount

[1] For details regarding the charters and laws under which central banks operate, see Appendix I of *Central Banks*, by Kisch and Elkin, and *Monetary and Central Bank Laws*, published by the League of Nations in 1932

bills of exchange, commercial and agricultural warrants, and bills to order with a currency not exceeding three months, bearing two signatures in the case of warrants and bills with approved collateral and three signatures in the case of other bills, and to make advances against the deposit of French Government, colonial, municipal and other specified securities for ninety days, the period being open to extension; and the Netherlands Bank was given power to discount bills of exchange, drafts and promissory notes bearing signatures of at least two parties, with a currency not longer than required by trade custom, and debenture bonds, redeemable within six months and guaranteed by the discounter, and also to make loans for one month or advances on current account against securities, goods, warrants, coin, bullion, and paper eligible for discount.

When the establishment of a system of central banking in the United States was finally decided upon in 1913, it was considered necessary to restrict by law the Federal Reserve Banks to those functions and powers which the recognised central banks of Europe were actually exercising. In other words, it was decided to bring the central banking law of the United States into conformity with strict central banking practice in Europe rather than with central banking law in Europe. The Federal Reserve Banks were, therefore, set up largely as banks of rediscount, with power to rediscount for the commercial banks which became members of the Federal Reserve System and to buy in the open market, from banks, firms, corporations or individuals, bankers' acceptances and bills of exchange of the kinds and maturities eligible for rediscount, with or without the endorsement of a member bank. Their powers of rediscounting for member banks were limited strictly to bills and promissory notes endorsed by the member banks' customers as well as by the member banks themselves.

Moreover, it was laid down that, in order to be eligible, such bills and notes must have arisen out of transactions actually related to agricultural, industrial or commercial purposes, and the proceeds from such paper must have been used for producing, purchasing, carrying or marketing goods, and not for financing fixed investments or investments of a purely speculative character or for relending operations. Furthermore, eligible paper was not to have a maturity exceeding ninety days, except in the case of agricultural paper arising out of the activities of farmers in connection with the production, marketing and carrying of agricul-

tural products and the breeding, raising, fattening and marketing of livestock. For agricultural paper the maturity allowed was six months.

It was soon found, however, that under abnormal conditions (such as during a great war or a severe and prolonged depression), the restrictive provisions of the Federal Reserve Act did not allow of sufficient scope for the creation of central bank credit. Accordingly, in 1916, the Federal Reserve Banks were authorised to make advances, for periods not exceeding fifteen days, to member banks against their promissory notes secured by Government securities or by paper eligible for rediscount, and to rediscount bankers' acceptances drawn to create dollar exchange. In 1923 they were also empowered to rediscount eligible agricultural paper for Federal Intermediate Credit Banks, and the maturity allowed for such paper was extended from six to nine months.

In 1932, under another set of highly abnormal conditions, a further expansion of the basis for Federal Reserve loans to member banks was found necessary, and it was provided that, in exceptional and exigent circumstances, and when a member bank had no further eligible and acceptable assets available to enable it to obtain adequate credit accommodation, Federal Reserve Banks could make advances, for any period not exceeding four months, to such a member bank on its time or demand notes secured by any collateral satisfactory to the Federal Reserve Banks. Provision was also made in 1932, for the first time, to enable the Federal Reserve Banks, in unusual and exigent circumstances, to discount eligible paper directly for any individual, partnership or corporation which was unable to obtain adequate credit accommodation from other banks. Moreover, in 1934 the Federal Reserve Banks were empowered to make loans, for periods not exceeding five years, to industrial concerns for working capital purposes either directly or through a financial institution, but again it was laid down that these loans could be made only when credit was not obtainable on a reasonable basis from the usual sources.

In connection with the new regulation[1] on discounts and advances by the Federal Reserve Banks issued by the Board of Governors of the Federal Reserve System in 1937, it was stated that 'the Board was also guided in its determination of eligibility requirements by the recognition of the fact that at a time of a deflationary trend it is important for the Federal Reserve System

[1] *Federal Reserve Bulletin*, October, 1937, p 979

to lend with the greatest freedom consistent with safety', since 'at such times technical limitations on the character of eligible paper endanger rather than protect the safety of the banking structure', and that 'the Board believes that the assurance of support in case of need given to member banks with sound assets will encourage these banks to give their communities the financial services that they require'.

It will be observed that it has been found necessary to increase considerably the Federal Reserve Banks' powers of rediscounting and lending. This has brought the Federal Reserve Act more into line with the charters and laws of the older central banks. The experience of the Federal Reserve Banks has demonstrated the great danger of placing undue restrictions on central banks based upon their policy and operations in normal times. While the original Federal Reserve Act largely conformed with the actual practice, followed by the older central banks prior to 1914, it did not conform with their practice under the abnormal conditions of the war and post-war periods and the period subsequent to 1929, since they were likewise called upon to loosen their requirements and expand their operations, in short, to make greater use of their powers[1] than was previously found to be necessary or desirable

Most of the new central banks which were established after 1920 were given wider powers than those which the Federal Reserve Banks had at that time. The rediscounting powers of the former were based largely on those of the latter, but the former were given the right to deal directly with the general public in the same kinds of paper as were eligible for rediscounts and advances to the commercial banks. The rediscounting and lending powers of these new central banks occupied a position almost midway between the powers provided for in the Federal Reserve Act of the early 'twenties and those in the statutes of the older central banks. The new central banks, however, also found out in due course that their powers of lending were too restricted, particularly in times of financial crisis, and consequently their powers had to be extended, principally in the direction of increasing the variety of securities against which they could make advances.

[1] In the case of some of these older banks the lending powers also had to be extended The Bank of France, for example, was empowered in 1936 to discount or rediscount bills drawn against wheat in storage, or drawn by concerns affected by the social reform laws and bearing the guarantee of the Caisse Centrale des Banques Populaires, or drawn against the receipts of certain French exporters representing amounts blocked in or not yet transferred from countries with transfer restrictions.

The South African Reserve Bank, for example, was empowered in 1930 to make advances not only against trade and agricultural paper eligible for discount and Treasury bills or other Government securities with a maturity not exceeding six months, as was formerly the case, but also against long-dated Government and Municipal securities, one-name bills or promissory notes secured by documents of title representing staple commodities fully insured and having extensive and active markets, and non-speculative dividend or interest-bearing securities having a ready sale on the stock exchange. Moreover, the maturity of commercial paper eligible for discount was extended from 90 to 120 days. Finally, under the new law of 1944 the only restrictions imposed on the Bank in regard to collateral loans were that it may not grant loans against fixed property or its own stock or the shares of any banking institution.

Dealings with Public. While almost all the older central banks, and many of the newer ones, have the power to deal directly with the public, they have come more and more to accept the principle that a central bank should not ordinarily engage in general banking business with private customers to any great extent.

From the point of view of credit control, direct dealing with the public has been found to be of more limited scope and to produce less satisfactory results, in the long run, than open-market operations and rediscounts. Moreover, the central bank requires the active and whole-hearted co-operation of the commercial banks for the purpose of general credit control, and such co-operation can hardly be expected unless the central bank, as a matter of deliberate policy, restricts its direct competition with the commercial banks in their ordinary banking business, provided they give satisfactory services at reasonable rates to the community.

In short, it is increasingly recognized by central banks that banking operations with the public should be conducted only to the extent that they are considered absolutely necessary in the national economic interest; and that, if it is considered desirable to expand central bank credit at any time, such credit should rather be distributed to the public through commercial banks, discount houses and other financial institutions, or be created through open-market operations or subscriptions to issues of Government loans and Treasury bills.

In recent years, a number of central banks which used to conduct a large business with private customers have curtailed their

dealings with the public, or been required to do so by law. In Italy, for example, it was provided, under a new law in 1936, that the Bank of Italy should confine its discount business to rediscounts for banks and other credit institutions, and that its discounts for private persons should be completely liquidated within a certain period. Advances against securities, however, could be made to private persons as well as to banks.

The Bank of Mexico, whose discount and loan transactions with the public had already been restricted by the law of 1931, was specifically required, under the law of 1936, to deal only with member banks and not with the public; and in Ecuador the new law of 1937 restricted the direct dealings of the Central Bank with the public.

In Greece, where the former central bank, the National Bank of Greece, had dealt directly with the public on a large scale, it was decided in 1928 to create a new central bank, the Bank of Greece, rather than that the National Bank should discontinue its commercial activities In Argentina and India, where the Bank of the Argentine Nation and the Imperial Bank of India had operated as commercial banks performing some central banking functions, it was likewise decided to establish special central banks whose dealings with the public should be restricted.

In Bolivia, the Central Bank stated, in its annual report for 1930, that 'to manage a central bank, like our own, which before its reorganisation was operated as a commercial bank and which even now has in its portfolio many obligations of slow liquidation, is much more difficult than managing an entirely new central bank, which has no operations or obligations on its books which do not correspond strictly and legally to the functions of a real central bank'.

The Bank of France, which had been an active competitor of the commercial banks in the discounting of bills for private customers, was reported some years ago to have restricted its direct discounts and to have virtually ceased competing with the other banks for new business.

When the new charter of the National Bank of Egypt was considered in 1939, it entered into an agreement with the Egyptian Government, providing *inter alia* that 'the Bank will continue to do commercial business but will follow a policy of gradually withdrawing from the smaller operations in which it is at present engaged'.

Contrary to this general trend, however, the Commonwealth

Bank of Australia Act of 1945 laid down that 'it shall be the duty of the Bank, through the General Banking Division, to develop and expand its general banking business', and that the Bank 'shall not refuse to conduct banking business for any person, by reason only of the fact that to conduct that business would have the effect of taking away business from another bank'. This policy was reversed again in 1953 when a separate Commonwealth Trading Bank was created in the place of the former General Banking Division of the Commonwealth Bank with the declared object of protecting the trading banks from unfair attack by the Commonwealth Bank when operating under a Government with socialist objectives.

Decline of Rediscounts. The function of rediscount suffered a considerable decline during the 'thirties and the 'forties. As a result of the creation of central bank credit in other ways and for special purposes, the banks were almost everywhere provided with sufficient cash for practically all requirements. In many countries this situation arose mainly from the deliberate adoption, after the abandonment of the gold standard, of a cheap-money policy which was implemented by the central bank through the direct extension of accommodation to the Government and/or the increased use of open-market operations[1] as a means of maintaining the elasticity and liquidity of the credit structure. The creation of central bank credit was also promoted by the revaluation of gold reserves[2] at the higher price of gold in terms of depreciated currencies, and, particularly in those countries which enjoyed a net favourable balance of payments over that period, by the centralisation of gold and foreign exchange in the central bank and/or in an exchange stabilisation fund.

In the United States, apart from the effects of the inflow of gold and the revaluation of the gold reserves, the open-market operations of the Federal Reserve System virtually nullified the normal working of rediscounts. In 1934 the highest figure for month-end rediscounts was $83,000,000, in 1936 $9,000,000 and in 1939 $8,000,000, while even under the stress of war conditions the figure never rose much above $200,000,000 The System's holdings of Government securities, on the other hand, increased from under $300,000,000 at the end of 1928 to $2,430,000,000

[1] See Chapters XI and XII

[2] Central bank credit was created through revaluation in the sense that, apart from the liquidation or reduction of Government debt to the central bank in some countries and an allocation or transfer to an exchange stabilisation fund in a few instances, the revaluation profit was credited to the Government and thus brought into the money stream.

at the end of 1933, $19,000,000,000 at the end of 1944, and $24,300,000,000 at the end of 1945.

In Great Britain, during World War II, the Bank of England followed new methods which superseded the old rediscount procedure. At the end of 1939, for example, the Bank adopted the technique of buying short-dated Treasury bills from some of the banks which in turn purchased long-dated bills from the market. In this way the Bank increased its total holdings of Government securities by £38,000,000 between 6th December, 1939, and 3rd January, 1940, and avoided the need for year-end rediscounts on the part of the discount market. In one way or another, direct operations in Treasury bills between the banks and the Bank of England were conducted on various occasions during the war,[1] while open-market operations, apart from direct subscriptions to Treasury bill issues and ways and means advances to the Government, were carried out by the Bank to the extent necessary to maintain the cash position of the banks in the face of a continuous increase in the note circulation and in their deposit liabilities under war conditions, as well as to avoid the discount market having to rediscount with the Bank at its penal rates. Thus, the Bank of England's holdings of Government securities increased from £700,000,000 on 6th September, 1939, to £1,720,000,000 at the end of 1945, but were subject to fluctuations during the course of every year in somewhat the same manner as in the case of rediscounts in former times.

In a large number of other countries, as explained in Chapter III, the central bank's holdings of Government securities and/or its advances to the Government already increased considerably between 1929 and 1939; and in most of those which became directly involved in World War II, the creation of central bank credit for Government purposes was further resorted to on a gigantic scale. In some countries, on the other hand, the strong cash position of the commercial banks was caused primarily by a net favourable balance of payments and the revaluation of gold reserves.

In short, whether additional central bank credit was created against Government debt or against gold and foreign exchange,

[1] The scale of direct operations in Treasury bills between the commercial banks and the Bank of England, however, declined after July, 1940, when the issue of Treasury deposit receipts to the banks was introduced and came to be increasingly used as the elastic element in the Government's floating debt. At the end of 1944 Treasury deposit receipts amounted to £1,795,000,000, compared with a total amount of £3,806,000,000 of Treasury bills outstanding

it had the effect of maintaining, although in varying degrees depending on circumstances, the cash reserves of the commercial banks above the statutory or traditional minimum, and thus of eliminating the need for rediscounts with the central bank, except on rare occasions and in the case of individual institutions affected by special conditions.

In recent years, however, there has been a revival of rediscounts in some countries due to the reorientation of monetary policy which will be discussed in Chapter XVI. This movement started in Western Europe during the years 1946-48, but it was not until 1951 that rediscounts again began to assume some importance in other parts of the world. In the United States, for example, the month-end average of rediscounts, which had remained relatively low during the post-war period, rose to $350,000,000 in 1951 and $700,000,000 in 1952, which reflected official policy to restore the discount mechanism as a restraint on inflation. In Great Britain, moreover, the arrangement under which the Bank of England supplied the needs of the money market at relatively fixed rates was discontinued in November, 1951, and the old rediscount procedure under conditions of a flexible market was restored. Rediscounts with the Bank of England have, therefore, again made their appearance at certain times, although not on the same relative scale as in former times.

Conclusion. Past experience has shown clearly that central banks should have relatively wide powers of rediscounting and lending for use in times of emergency. On such occasions they should be in a position to extend accommodation in any manner which they regard best in the circumstances. In normal times, whether central banks have wide powers or not, their rediscounting and lending operations generally will tend to conform with certain rules which have virtually become central banking tradition.

For example, it should not be considered necessary to stipulate in a law, as was done in the 1932 and 1934 amendments of the Federal Reserve Act relating to the making of advances to the general public and to industrial concerns,[1] that the advances should be made only in unusual and exigent circumstances and when credit was not obtainable on a reasonable basis from the usual sources; or, as was provided in the Reserve Bank of India Act, that the powers of direct discounts and advances should be used only when a special occasion has arisen, making it necessary

[1] Industrial loans by the Federal Reserve Banks amounted on an average to less than $10,000,000 during the years 1935-40 and to about $20,000,000 in 1941-44 and $5,000,000 in 1952.

or expedient that such action should be taken for the purpose of regulating credit in the interests of Indian trade, commerce, industry and agriculture. The majority of central banks, old or new, do the bulk of their business with banks and other credit institutions and with the State, and deal directly with the general public only to a small extent, if at all, even though many of them have full power to do so.

Central banks should, however, not be unduly hampered by legal restrictions. Frequently, the mere fact that a central bank has the power and the will to accommodate the general public, in the event of the commercial banks not fulfilling their duties properly, will be conducive to the maintenance of satisfactory banking conditions and satisfactory relations between the banks and their customers. Moreover, the commercial banks themselves must feel that, in the event of an acute emergency, the central bank's powers of rediscounting and lending would be wide enough to give them adequate accommodation, so that they could in turn give the requisite accommodation to their customers in order to tide them over the emergency. As Burgess[1] said concerning the legal provision of 1932 which authorised the Federal Reserve Banks to make advances to member banks against other than eligible paper, 'the assurance to all member banks that they could, if necessary, obtain the credit they required at the Reserve Banks against any of their sound assets helped to give them reassurance and courage at a time when it was greatly needed and placed them in a position to lend more freely on ineligible paper'.

It was shown in the preceding pages that, whereas rediscounts formerly played an important rôle as an elastic element in the credit structure and as a means of maintaining the liquidity of the commercial banks and other credit institutions during periods of seasonal or general financial strain, they suffered a considerable decline during the 'thirties and the 'forties and were virtually supplanted by open-market operations and other methods of creating central bank credit. This situation has recently been reversed in some countries but still prevails in many countries and will continue as long as the monetary authorities of the countries concerned prefer the use of open-market operations or other methods as a means of regulating money rates. Further aspects of the future as well as the past and present of rediscounts will be discussed in connection with the discount-rate policy of central banks in Chapters IX and X.

[1] *Reserve Banks and the Money Market.* Revised Edition (Harper), pp 51-2.

CHAPTER VII

THE CENTRAL BANK AS A BANK OF CENTRAL CLEARANCE, SETTLEMENT AND TRANSFER

Introduction. The function of central clearance and settlement was first developed by the Bank of England about the middle of the nineteenth century, after the other banks had for years followed the practice of keeping balances with the Bank owing to its being the principal bank of issue and the Government's banker. According to Sprague,[1] it was in 1854 that the plan was adopted of settling the differences between the various banks at the end of each daily clearing by transfers between their respective accounts at the Bank of England.

Thereafter it was gradually taken up by many of the other banks of issue which came to develop into central banks; and most of the new central banks accepted it as a matter of course and as an automatic function of a bankers' bank. In the case of some central banks, however, specific provision was made in their laws that they should perform the function of facilitating clearings between banks. For example, the Central Bank of Chile was ordered 'to act as a Clearing House for member banks in Santiago and other cities of the Republic in which it has branches', and the Bank of the Republic of Colombia was enjoined in similar terms. The purpose of the reconstituted Reichsbank and of the National Banks of Austria and Hungary was stated in their laws to be, *inter alia*, 'to facilitate the clearance of payments'. In Australia, apart from the Commonwealth Bank being required to act as the bank of central clearance and settlement, statutory provision was made that the settlement of balances between banks had to be effected by cheques drawn on and paid into the Commonwealth Bank. In various other cases the statutes also make a specific reference to clearing-house operations or clearing facilities, but only as a permissive authority and not as a statutory injunction.

A distinction must, however, be made between central banks

[1] As Editor of Dunbar's *Theory and History of Banking* (Third Edition), p 87

operating in countries where the commercial banks themselves have established elaborate clearing-houses with constitutions and premises of their own, and those in areas where no such independent institutions have been set up by the commercial banks. In the former cases the central bank, apart from its being a member of the local clearing house, ordinarily has to perform only the function of settling the differences between banks at the end of each clearing or at the end of the day, whereas in the latter it usually provides for clearing-house accommodation and supervision as well as for the settlement of balances.

Although not usually regarded as a particularly important function, central clearance and settlement is looked upon as a necessary or a natural function of a central bank. Shaw[1] maintained that 'a central bank will operate as the clearing house for all its member banks as a mere matter of mechanism or of bookkeeping'. In short, as the central bank became the custodian of the cash reserves of the commercial banks, it was an easy and a logical step for it to assume the duty of acting as a settlement bank or a clearing house for the other banks. Kisch and Elkin[2] also regarded it as obvious for the central bank 'to set up an expeditious and economical machinery for the clearance of drafts and settlement of internal accounts', because 'as holder of the balances of the commercial banks a central bank is specially qualified for this duty'.

As examples of those who consider that it is an important function of a central bank, the views of Jauncey[3] and Willis[4] may be quoted. Jauncey held that 'clearing is the main operation of central banking', and said in another instance, with reference to the statutory provision which compelled all commercial banks in Australia to clear through the Commonwealth Bank, that 'internally, then, the bank has the most important feature of central banking'. Willis also expressed the view that 'the clearing function, with its ancillary elements, . . . is among the most significant of central banking functions and is one for which only a very incomplete substitute may be found through resort to other expedients'. One may, however, fully endorse the view that a perfect system of clearance and settlement can only be obtained by centralising such operations in the central bank, without sub-

[1] *Theory and Principles of Central Banking*, p. 155.
[2] *Central Banks* (Fourth Edition), p 144.
[3] *Australia's Government Bank*, pp. 166 and 168.
[4] *Theory and Practice of Central Banking* (Harper), p. 359.

scribing to the view that it is one of the most significant functions of such a bank.

Meaning and Significance of Central Clearance and Settlement. As the commercial banks keep their surplus cash on deposit with the central bank and thus have accounts with that institution, it follows that settlements between the banks can most easily and conveniently be effected on the books of the central bank. Over a period there is seldom a substantial difference between the amounts of cheques and drafts drawn on any bank and presented by other banks on behalf of their customers for payment, and that of cheques and drafts on these banks received by its own depositors; but the daily differences in the clearings between such banks may be considerable, and such differences can best be adjusted by means of debit and credit entries in their respective accounts with the central bank Should the clearing go heavily against some banks at any time, to such an extent that their credit balances with the central bank fall below the minimum prescribed by law or maintained by tradition, they can rediscount with the central bank for a few days if they expect the clearing to swing in their favour again soon In fact, apart from withdrawals of currency, this is one of the more general reasons for rediscounting.

While the process of effecting settlements between banks on the books of the central bank is a comparatively simple operation, it is one which is of great convenience to the banking community and of some significance in economising the use of money in banking operations, especially where the central bank has branches in various parts of the country and also uses its branches for the purpose of local settlements. It thus tends generally to strengthen the banking system of a country.

Moreover, Willis[1] emphasised that a system of clearing, organised and solidified by the central bank, 'is not only a means of economising cash and capital, but is also a means of testing at any time the degree of liquidity which the community is maintaining —a matter which it is essential for the central bank to know from day to day'. He even went as far as saying that 'the attitude adopted (throughout his book) has been that of treating clearances as a test of liquidity', and that 'the bank performs its characteristic function by determining what classes of goods are to be admitted to the field of exchange and the process of clearing indicates the extent to which the judgments which have thus been registered by the bank, have been sound, or at least in accordance with the

[1] Op. cit , pp. 343 and 359.

judgments of other elements in the productive processes of the community'. This may indeed be overstating the case for the clearing process as a test of general liquidity in the community, but the process of central clearance and settlement does afford the central bank a valuable means of ascertaining the relative trends of the operations of individual banks.

Bank of England as Settlement Bank. In England there are independent clearing houses in London and in eleven provincial towns, in seven of which the Bank of England has branches. In London the Bank of England is a member of the London Clearing House, and the Clearing House as well as the commercial banks have accounts at the Bank of England. At the end of each day the debit or credit clearing balances of the banks are settled by means of payments to or from the Clearing House through the medium of their accounts at the Bank In the seven provincial towns where the Bank has branches, its branch is a member of the Provincial Clearing House and keeps accounts for the Clearing House and the local branches of the commercial banks, while the daily differences are settled by payments to or from the Clearing House through the medium of such acounts. As regards the four towns where there are Provincial Clearing Houses but no branches of the Bank, differences are settled between the head offices of the banks in London in the same way as differences in the London clearings.

A more or less similar procedure, with modifications depending upon local circumstances, is followed in the United States, France, Holland, Sweden, Denmark, Japan, etc, where independent clearing houses are operated in the principal cities.

Special Functions of Some Central Banks in Europe. In those countries of Europe where the system of payments by cheque or transfer and of clearings between banks developed very slowly, the central bank was obliged, as Lemoine[1] said of the Bank of France, 'to follow, in agreement with the Government, a systematic campaign in favour of the operations of clearing and transfer'. According to statistics cited by him, the efforts of the Bank of France between 1919 and 1926 achieved the quadrupling of the number of clearing houses and the trebling of the turnover of the clearing houses and of the transfer of funds by the Bank. In fact. the lack of adequate transfer facilities in France has been submitted as one of the main reasons for the establishment by the Bank of France of a network of branches and agencies all over France.

[1] *Foreign Banking Systems.* Edited by Willis and Beckhart, p. 550.

This was also true of Germany, where the Reichsbank since its inception used its vast network of branches and offices for the purpose of promoting payments by transfer throughout Germany either free of cost, not only for banks and other financial institutions but also for members of the general public who had current deposit ('giro') accounts with the Reichsbank, or at a nominal charge for those who did not have 'giro' accounts. The transfer business of the Reichsbank grew to enormous dimensions, and almost 95 per cent of the total turnover in 1938 was effected without cash changing hands. Economy of cash was, in fact, one of the main reasons for the intense activity of the Reichsbank in the 'giro' business. Moreover, owing to the slow development of clearing facilities between banks, the Reichsbank established clearing houses at its head office in Berlin and at its branches in the principal towns.

In such countries as Holland, Belgium, Switzerland and Hungary, where the 'giro' system of transfer through the State postal and telegraph services was well developed and largely performed the function of the bank cheque, the central banks were not originally called upon to the same extent as in France and Germany to facilitate transfers for the general public. In due course, however, they also decided upon a more active policy in promoting payments by transfer either free of cost or at a nominal charge. In the Netherlands Bank, for example, the total turnover of transfer operations during the year 1938-39 consisted of 797,000 in number and 19,000 million guilders in amount, while the Swiss National Bank held deposits on 'giro' accounts to the amount of 897,000,000 francs at the end of 1941.

Special Functions of Federal Reserve Banks. Before the establishment of a central banking system in the United States, where there are thousands of independent unit banks instead of a small number of large banks with branches all over the country as is now the case in most countries, a great deal of expense and delay was suffered in connection with the collection of cheques drawn on banks in other towns of the United States. It was customary for the paying bank to charge an exchange commission on cheques drawn on it and presented for payment by a bank in another town. Sometimes, owing to lack of the necessary arrangements, for example, as between banks in the smaller towns, various banks had to be employed before payment was finally effected. This was known as 'routing of cheques'. The exchange commission charged by banks was justified by them on the ground that, in order to

pay their 'out-of-town cheques', they had either to ship currency to distant points or maintain balances there.

Soon after the Federal Reserve Banks commenced operations, they sought to bring about radical reforms in the handling and collection of cheques, and also of bills and drafts. Within two years they organised a nation-wide system of cheque collection, based on payment of cheques at par. Through the twelve Reserve Banks and their branches, and through the reserve balances and accounts which each member bank had to keep with its Reserve Bank, the Federal Reserve System provided the requisite network for the speedy and efficient handling and collection of cheques all over the United States.

Under this nation-wide plan, a Reserve Bank or any of its branches accepts from the commercial banks cheques for collection at par in any of the towns within its area of operation or within that of any other Reserve Bank or branches thereof. The account of the collecting bank with its Reserve Bank or branch thereof is credited, while the account of the paying bank with its Reserve Bank or branch thereof is debited, without any charge whatever, although they may be situated three thousand miles apart, as between the Federal Reserve Bank of New York and that of San Francisco or between the Buffalo branch of the former and the Los Angeles branch of the latter. As between one Reserve Bank and another, settlement is effected through the medium of debits and credits in the inter-district settlement fund maintained by the Reserve Banks with the Board of Governors of the Federal Reserve System in Washington. Should there be any need for currency shipments owing to a strong tendency for funds to move in a certain direction, the Reserve Banks concerned arrange for such shipments and pay the cost thereof.

Under the Federal Reserve Act, the Reserve Banks were not permitted to collect cheques on which the paying bank charged a commission. Some banks[1] have continued to charge such a commission and have, therefore, remained outside the system of cheque collection by the Reserve Banks at par, but the great majority have fallen into line therewith. According to Burgess,[2] it is estimated that 98 per cent of the cheques drawn in the United States are payable at par through the Federal Reserve

[1] At the end of 1939 all the 6,362 member banks and 5,396 non-member banks were on the par list, while 2,719 non-member banks had not yet joined the par collection system, but these were almost entirely small country banks (see *Annual Report of Board of Governors of the Federal Reserve System for 1939*, p. 21).

[2] *Reserve Banks and the Money Market* Revised Edition (Harper), p 99.

System. In this connection, however, it must be said that it is not the practice to give immediate credit in respect of cheques accepted for collection, but that a system of deferred credit has been adopted, depending upon the time ordinarily taken for the collection and transfer of the proceeds.

Moreover, provision has been made for telegraphic transfers of funds through the Federal Reserve System to all parts of the United States, at par for member banks when the transfers are made for their own purposes, and subject to a small charge to cover the cost of the telegram when the transfers are made for them for the accounts of other banks or companies and individuals. The procedure followed in the case of telegraphic transfers, as to debit and credit entries on the books of the Reserve Banks and the inter-district settlement fund, is the same as for the collection of cheques. Facilities are also provided by the Reserve Banks to member banks for the collection of bills of exchange, promissory notes and drafts, and even interest coupons of municipalities and companies

Burgess[1] emphasises that 'what the clearing house did for city checks the Federal Reserve System has done for out-of-town checks in providing a means of systematic handling and thus reducing expense, delay, and risk in collections', and that, 'since the Reserve System has cut in half the time required to collect checks, it has greatly reduced the "interest charge" which some banks make for the use of funds represented by uncollected checks'.

Position at Other Central Banks. Although the peculiar conditions prevailing in the United States and arising principally out of the existence of 15,000 independent banks are not repeated elsewhere, the clearance, settlement and transfer operations of the Federal Reserve Banks have had some influence on other central banks, particularly the newer ones which are based to some extent on the American model and most of which also have extensive areas of operation. They do not, however, have the problem of large numbers of unit banks, since they have predominantly the branch-bank system; and under the latter, of course, the collection of cheques is greatly facilitated by means of debit and credit entries between branches of the same bank, while the adoption of central clearance and settlement through the central bank has further facilitated and expedited the process.

Under the branch-bank system, provided the banks have a

[1] Ibid., p. 105.

large and well-spread number of branches, the central banks are usually not called upon to accept from other banks cheques and bills for collection, but they can with great benefit provide facilities to the commercial banks, and through them to their customers, for transfers of funds at par between all important centres. This function is performed by many of the new central banks. As in the United States, they found exchange commissions being charged by banks for the collection or payment of cheques and for transfers of funds. In both cases the banks justified their action on the ground that they frequently had to incur the cost of actual currency shipments; and in the case of cheques, the banks of several countries submitted a further justification for the exchange commission on the ground not only that they incurred a risk of loss on dishonoured cheques, but also that, since most of their advances were made in the form of overdraft on current account, their practice of crediting their customers' accounts immediately with the proceeds of cheques caused them a loss of interest.

These banks differed, therefore, from the banks of the United States in three respects, namely, that they had a network of branches instead of operating only in one town; that they gave immediate credit instead of deferred credit; and that they extended accommodation to customers mainly in the form of overdrafts rather than discounts of promissory notes and acceptances. In these circumstances, the central banks concerned could not inaugurate a nation-wide system of cheque collection at par. They could, however, by having branches in all the important towns of their countries, establish a system of transfers of funds at par for the general public between such towns by arranging to make transfers at par for the commercial banks and also for the public, should the commercial banks fail to provide them with this facility.

The South African Reserve Bank, for example, first arranged to supply notes and other currency (including gold currency until the Union of South Africa suspended gold specie payments at the end of 1932) free of charge to the commercial banks at all points where it was represented, and also to make telegraphic transfers at par for the commercial banks which enabled them to mobilise and utilise their available funds efficiently and economically. The next step was to arrange with the commercial banks to accord the facility of transfers at par to the public, subject to a nominal maximum charge of 5s., between all towns where the Reserve Bank was represented. In view, however, of the prevalence

of overdrafts and the practice of giving immediate credit to customers, the banks consider that they cannot be expected to relinquish the exchange commission on 'out-of-town' cheques, unless, of course, a more suitable kind of charge can be devised.

Conclusion. In conclusion, it may be observed that all over the world central banks have in various ways tried to improve the processes of clearance, settlement and transfer in their respective countries, and that further improvements in such processes as a result of central bank action and guidance are not at all unlikely.

CHAPTER VIII

THE CENTRAL BANK AS THE CONTROLLER OF CREDIT

Introduction. The control or adjustment of credit is accepted by most economists and bankers as the main function of a central bank. It is the function which embraces the most important questions of central banking policy and the one through which practically all the other functions are united and made to serve a common purpose. While such functions as the issue of notes, the performance of banking and other services for the Government, the custody of reserves and the settlement of clearing balances were originally evolved independently of the function of credit control, they are regarded to-day, along with those of rediscount and lender of last resort, as necessary or desirable adjuncts of that function.

The regulation of currency through the sole or principal right of note issue is now generally linked up with the control of credit, even in the laws of various central banks. The Bank of Canada Act, for example, instructs that bank 'to regulate credit and currency, to control and protect the external value of the national monetary unit, and to mitigate by its influence fluctuations in the general level of production, trade, prices and employment so far as may be possible within the scope of monetary action'; and the Reserve Bank of India is 'generally to operate the currency and credit system of the country to its advantage'. The sole or principal right of note issue does, as explained in Chapter II, give the central bank at least some measure of control over excessive expansion of credit by the commercial banks, since such expansion inevitably causes an increase in the demand for note currency.

In the same manner the management of the Government's accounts, the granting of direct or indirect accommodation to the Government and the custody of the commercial banks' cash reserves and of the nation's metallic and exchange reserves are now definitely associated with the control of credit by the central bank. For example, the more the central bank has to create credit directly or indirectly for Government purposes, the less it has to

do by way of rediscount in order to adjust the supply of credit to the legitimate requirements of the country, and vice versa; and the more completely it operates as the custodian of reserves, the more easily and effectively can it perform its general function as the controller of credit in the national economic interest.

Need for Control of Credit. For many years it has been almost universally accepted that the creation and distribution of credit, under the intricate economic organisation existing in most countries, should be subjected to some form of control. The main reason for this was that credit came to play a predominant part in the settlement of monetary and business transactions of all kinds, and thus to represent a powerful force for good or evil. In fact, all countries of any economic importance have, to a greater or smaller extent, come to be based on a credit economy rather than a money economy.

While there are considerable differences of opinion as to what extent and in what circumstances changes in the volume of credit may bring about changes in the purchasing power of money and/or in the volume of business activity and employment, it is generally recognised that there is some relationship between these factors and that changes in prices and business activity may cause disturbances and maladjustments in various parts of the economic structure. In short, the social and economic consequences of severe fluctuations in the purchasing power of money and in business activity during the past forty years have emphasised the need for the control of credit in one form or another.

Objectives of Credit Control. Although for years there has prevailed general agreement on the need for credit control and the entrusting of such control to a central bank with special privileges and powers, there has been great difference of opinion concerning the main purpose for which credit should be controlled. On the broader issues, the controversy has raged principally round the question as to whether the primary objective should be the stabilisation of exchange rates or of the general price level or of business activity and employment.

The traditional objective of credit control was that of keeping exchange rates stable through the medium of a monometallic or bimetallic standard, whatever repercussions might result from the use of the methods by which the objective was usually achieved. The gold standard, for example, was maintained for this purpose almost throughout the world from 1875 to 1914, and again in various forms and degrees during the period 1925-31.

The maintenance of stable exchange rates under the gold standard was, however, accompanied at times by strong upward or downward trends or considerable short-term fluctuations in internal and world price levels and by an almost regular series of alternations of expansion and contraction of economic activity. As a result of this, the desirability of aiming deliberately at the stabilisation of the price level and/or the smoothing out of the business cycle was discussed from time to time, particularly in academic circles Some attempts were actually made to achieve this, notably the one by the Federal Reserve System of the United States during the five years 1923-28; but, in general, these attempts were qualified by the accepted principle that the banking and financial conditions of a country should conform primarily to the requirements of more or less fixed rates of exchange with other countries. In other words, the levels of commodity prices, production and trade in a country were regarded as subservient, in the final instance, to the necessity for maintaining exchange rates in accordance with a recognised set of international rules. If circumstances rendered it necessary that something should give way, it should be prices and economic activity first and exchange rates last.

The main reason for the general policy of stable exchange rates, prior to 1931, was the universal belief and conviction at the time that exchange stability was of paramount importance for the maintenance of international confidence and the conduct of international trade on the largest possible scale, which in turn was considered to be one of the prime requisites for the maximum economic welfare of the world. This is a point of view which is still held by a large number of bankers and economists, namely, that the maintenance of stable rates of exchange based on fixed gold parities of currencies, and of the discipline which is associated therewith, constitutes in the long run the most effective means whereby the economic and social interests of nations individually and collectively can be served.

In recent times, particularly since the world-wide suspension of the gold standard, greater prominence has been given, not only in academic but also in banking and business circles, to the question of controlling credit with the object of stabilising the price level. There have been many who expounded the view that price stabilisation is to be preferred to the stabilisation of exchange rates if the one is at any time found to be incompatible with the other, on the ground that the stabilisation of domestic, if not

international, prices would be most conducive to the national economic welfare.

Their point of view is based, in the first instance, on the fact that changes in the price level cause important changes and disturbances in the economic relationships within a country (e g between creditor and debtor, between producer and consumer, between employer and employee, etc.) as well as between countries, which might in turn bring about serious and prolonged maladjustments, with dire economic and social consequences to all the countries concerned. Stabilisation of the price level, on the other hand, would thus at least eliminate such disturbances and maladjustments. Moreover, they argue that the maintenance of stable exchange rates places a country at the mercy of the monetary policy of other countries, inasmuch as inflationary or deflationary movements in, for example, the one or two predominant countries would ordinarily be transmitted to all countries which maintained fixed rates of exchange with them, whereas the stabilisation of internal prices accompanied by adjustments in exchange rates, to the extent necessary for that purpose, would render a country independent of the monetary policy of other countries. This was actually adopted for a time as the official policy of Sweden[1] when it suspended the gold standard towards the end of September, 1931, i.e. a few days after the suspension of gold payments by Great Britain. During the 'thirties, such countries as Great Britain and the United States also followed a monetary policy, aiming *inter alia* at stabilising prices, but only after they had been reflated to an appropriate level.[2]

In contradistinction to those who prefer either stable exchange rates or a stable price level as the primary goal of monetary policy, there is an increasing number of economists and others who would rather see the monetary authorities aim in particular at the elimination or smoothing out of the business cycle which they do not in any case regard as purely the resultant of price movements. In their opinion, the attainment of the other two objectives is highly desirable but subsidiary to the maintenance of

[1] See Chapter XIV.

[2] According to the British Empire Currency Declaration of July, 1933, 'the Governments of the British Commonwealth should persist by all means in their power . . . in the policy of furthering the rise in wholesale prices, until there is evidence that equilibrium has been re-established, and thereupon they should take whatever measures are possible to stabilise the position thus attained', and about the same time President Roosevelt declared that 'the United States seeks the kind of dollar which a generation hence will have the same purchasing and debt-paying power as the dollar value we hope to attain in the near future'

a normal and steady rate of growth in general economic activity and to at least the prevention of booms and slumps, mass unemployment, etc.; and in this connection some of them also emphasise the importance of the maintenance of cheap money. In short, from the point of view of national economic welfare they consider that the maximum benefit is to be obtained by means of relative economic stabilisation, even at the risk of fluctuations in the price level or in exchange rates and gold parities. After the initial emphasis on the price-level objective during the early 'thirties, the official monetary policies of Sweden, Great Britain, United States and several other countries also tended to develop more and more in the direction of the objective of economic stabilisation.

The most recent tendency in official monetary circles is to combine the objective of international exchange stability (subject to provisions for orderly adjustment of exchange rates in certain circumstances) with that of promoting and maintaining high levels of employment and real income. This is embodied in the Monetary Fund Agreement, which represents the concerted effort of the United and Associated Nations to provide the necessary machinery for international monetary collaboration and co-operation, with a view to attaining and reconciling the objectives of international exchange stability and international economic stability on a high level.

Several countries also individually declared, in official documents[1] during 1944-45, that the basic objective of their general economic policy would, in future, be that of maintaining full employment (United States and Australia), or a high and stable level of employment and income (Great Britain, Canada, Sweden and South Africa); and that all available instruments of monetary, fiscal and other economic action would be applied towards the achievement of such objective.

Methods of Credit Control. The principal methods or instruments which may be used by central banks for the control or adjustment of credit are:

1. The lowering or raising of their discount and interest rates with a view to lowering or raising money rates generally and encouraging the expansion or contraction of credit;

[1] British White Paper on Employment (1944), United States Full Employment Act (1945); Canadian White Paper on Employment and Income (1945); Australian White Paper on Full Employment (1945), Report of Swedish Post-War Economic Planning Commission (1944); and South African White Paper on Outlines of Post-War Reconstruction (1944).

2. The buying or selling of securities or bills of exchange in the open market with a view to putting additional funds into the market or withdrawing funds therefrom and thus expanding or contracting credit;

3. The rationing of credit as an alternative or an addition to raising discount and interest rates;

4. The taking of 'direct action' either in the form of coercive measures against any offending bank or other financial institution or in the form of directives to banks generally concerning their lending and investment operations, in order to assist the central bank in controlling the quantity of credit as well as securing a better qualitative distribution of credit,

5. The lowering or raising of the minimum cash reserves to be maintained by the commercial banks, as an additional means of enabling the central bank to expand or contract their capacity to create credit;

6 The imposition of minimum secondary reserve requirements to be maintained by the commercial banks in the form of Government securities and other specified assets, in order to restrict their capacity to extend credit for general business purposes;

7. The regulation of the terms and conditions under which credit repayable in instalments may be granted for purchasing or carrying consumers' durable goods, as a means of exercising some direct control over the volume of outstanding consumer credit;

8. The regulation of margin requirements in connection with purchases of Stock Exchange securities, as an instrument for exercising some direct control over the volume of credit used in the security markets; and

9 The use of moral suasion and publicity to achieve the desired objectives.

10 The regulation or management of exchange rates and varying forms or degrees of exchange control have also been resorted to by many countries as instruments of monetary or general economic control. This will be dealt with in Chapter XIV.

The employment of any of these instruments of monetary control can, moreover, be supplemented by appropriate fiscal policy on the part of the Government and other public bodies as a further means of providing compensatory influences, e.g. through deficit financing of public works and enterprises and the lowering of taxation with a view to counteracting an undue contraction of private business activities, and through budget

surpluses and the raising of taxation in times of undue expansion of private business activities. The control of credit by the central bank can further be supplemented by State organisation or control of investment generally. The extent to which these methods can in practice be employed as supplements or alternatives to monetary control, will be discussed in Chapter XV.

Scope of Credit Control. With regard to the degree in which credit can be controlled to attain any of the objectives referred to above, various matters have to be taken into consideration.

In the first place, in order to secure prompt, effective and continuous control of credit, the central bank would require to have direct or indirect means of access to all forms of credit, i.e. not only bank credit but also other forms of productive, commercial and financial credit, such as bills of exchange, promissory notes, book credits, mortgage bonds and fixed-interest securities. As a generalisation, it can be said that bank credit falls within the direct range or sphere of influence of the central bank, but bank credit is not the only form of credit which is used for the purchase of commodities, real estate, securities and services. The other forms of credit which, at least to the extent that they are not based on 'created' bank credit, are derived directly from 'capital' and may, for the sake of convenience, be called 'capital credit', play an important part in the financing of trade, industry, agriculture, construction activities, commodity and security markets, etc.; and to the extent that they are so employed, these forms of non-bank credit constitute an addition to effective purchasing power at any particular time and have the same effect on prices and on the volume of production, trade and speculation, as bank credit has.

If there never occurred any fluctuations in the use of capital credit and in the direct investment of capital, bank credit would be the only elastic element in the credit and capital structure; and then the central bank would, by exercising control over the volume of bank credit, be able to bring the whole credit and capital structure under its influence. But since considerable fluctuations in the volume of capital credit and direct investment do take place as a result of changes in the political, economic and psychological conditions, its power to control credit is impaired or frustrated at least to the extent that it cannot influence such conditions in the right direction or counteract the fluctuations in capital credit or direct investment resulting therefrom.

Many economists who have advocated control of credit for the

purpose of price stabilisation or business-cycle control, give prominence only to bank credit and practically ignore other forms of credit. Such writers as Lewinski, Leaf, Anderson and Dunkman have, however, given due weight to non-bank credit in their discussion of monetary policy. Walter Leaf[1] said that the banks 'have little or nothing to do . . with the constant volume of credit which is kept afloat by the aggregate capital of the trading concerns of the country—the standing amount which all industrial and commercial businesses, from the producer to the retailer, carry on their books as an asset in the form of debts due to them'. Lewinski[2] points out that 'a rise of prices is always in its first phase accomplished without a resort to bank credit, the increased demand for goods being effected with the aid of book credits, bills of exchange, etc'. . Anderson,[3] in criticising Fisher's omission of book credits from his equation of exchange, says that 'if buying and selling are what count, if prices are forced up by the offer of money or credit for goods, and forced down as the amount of money and credit offered for goods is reduced, then one exchange must count for as much as any other of like magnitude in fixing prices'; and Dunkman[4] points out that 'too much attention has been devoted to instruments of bank credit—deposits and notes—to the exclusion of commercial and private credit instruments', and that 'in both fields, too great importance has been attached to the material embodiments of credit transactions—notes, drafts, and checks—and too little to the potential power of persons and corporations to acquire goods and services without paying for them immediately'.

It may be submitted that these forms of credit are not entirely unconnected with bank credit, since some of them are based on bank credit to a larger or smaller extent (through discounts of bills and notes by the banks or through loans and advances made directly or indirectly against the security of bills, notes, book credits, etc.), the proportion depending upon the financial position of businessmen and the state of business. In general, however, they can be regarded as being beyond the direct radius of action of central banks, and subject only indirectly to their moral influence.

Besides the commercial banks, there are in every country various other credit and financial institutions, such as savings

[1] *Banking* (Revised Edition), pp 92-93.
[2] *Money, Credit and Prices*, pp 66 and 15.
[3] *The Value of Money*, pp. 108-9.
[4] *Qualitative Credit Control*, p 37.

banks, people's banks, agricultural banks, industrial banks, mortgage banks, investment banks, building societies, insurance companies, trust companies, discount houses, finance houses, etc., whose operations in the field of credit and investment have in recent times come to assume a relatively important place in the credit and financial structure. Apart from this factor, these institutions have, in the course of their expansion and their search for new outlets for their funds, tended to impinge more and more on the commercial banks' terrain, and this increasing competition has, for example, made it difficult for the commercial banks to carry out a policy of general or special credit contraction at the request of the central bank without losing further ground to these institutions, whose operations are in any case of sufficient scope to frustrate the credit policy of the central bank at certain times. It has, therefore, become more and more essential for the central bank to spread its net of credit control so as also to cover such institutions

The central bank's normal relations with the commercial banks are in the very nature of things much closer than they could be with the other financial institutions, but in the interest of more effective credit control it is the duty of the central bank to devise ways and means of securing closer relations with the latter through some such medium as regular meetings and exchanges of views with their leading representatives, with a view to convincing them that all financial institutions have ultimately a common interest in the maintenance of sound credit conditions and to increasing its potential power of moral suasion over them whenever the occasion demands corrective action. This aim is, of course, facilitated in the case of such Government and private credit institutions as have direct customer relations with the central bank, but in respect of the majority of these other institutions which usually keep their accounts with the commercial banks, the latter can be of great assistance to the central bank in the application both of moral suasion and direct action.

With regard to bank credit, although it can as a general rule be said to fall within the direct sphere of influence of the central bank, the latter may even here encounter difficulties and resistances. The primary requirements for the effective control of bank credit by the central bank are, firstly, that the latter shall be endowed with adequate statutory powers and resources; secondly, that all the commercial banks of any importance operating in a country shall be brought within the purview of the central bank

and have direct customer relations with it, and that they shall regularly furnish the central bank with the requisite statistical and descriptive data concerning their operations; and thirdly, that the commercial banks shall co-operate whole-heartedly and intelligently with the central bank in the carrying out of its credit policy to the best of their knowledge and ability

In recent times great progress has been made in all these directions in every part of the world The central banks have been granted wider powers and greater freedom of action and have had the opportunities for acquiring greater experience Such deficiencies as still exist in some countries in connection with the first and second requirements mentioned above can easily be rectified by law or agreement. The commercial banks, on the other hand, have come to appreciate more and more the need for close and continuous co-operation with the central bank in their mutual interests. In fact, recent monetary and banking developments have all been in the direction of leaving the commercial banks no other choice short of endangering their very existence as private institutions All that remains to be done in this respect is the devising of ways and means of securing more effective consultation and co-operation between the central bank and the commercial banks. Such co-operation can, of course, be more easily attained where there is a considerable concentration of banking resources, as in England, Germany, France, Holland, Canada, Australia, South Africa and New Zealand, than in the case of countries which have a large number of banks, such as the United States, India, Switzerland, Roumania, Hungary and Norway.

Several countries have, in recent years, decided to give the bank the power of direct control over the credit operations of the commercial banks, rather than let it remain dependent on their voluntary co-operation. This new trend will be discussed under the heading of "Direct Action" in Chapter XIII

In all matters of credit control, however, the main trouble is that, in the absence of general economic control, neither the central bank nor the commercial banks can at all times effectively control the ultimate distribution and use of credit. The commercial banks can determine the immediate distribution and use of their credit, in accordance with the policy of the central bank; but the deposits which are, for example, created for the specified productive purposes can, through the medium of third, fourth or fifth parties, be applied to other productive purposes, or to consumption, or

to speculation in commodities, real estate or securities, or to the repayment of bank advances. The ultimate use of credit is the most elusive factor in central banking control, and for this purpose the central bank must, apart from the voluntary or compulsory co-operation of the commercial banks, rely largely on the moral influence which it is able to bring to bear on business-men, financial institutions and the general public through its actions, admonitions, appeals and expositions of facts and views

The personal element in credit control is generally a difficult force to contend with, and its importance appears to have been grossly underrated by many advocates of monetary reform schemes. The controller of credit is constantly confronted with the action, reaction and interaction of human factors which cannot always be accurately determined or completely neutralised. As McLaughlin[1] said, 'the principal factor in credit is a state of mind', and 'you cannot control credit . . . until you can control public opinion'.

It should be clear, therefore, that under the modern complex organisation, and particularly in a democratic economy, central banking control has to contend with virtually insuperable difficulties at times. This does not, however, mean that a central bank should in such circumstances refrain from deliberate attempts to control credit for a specific purpose. The intention is merely to show the limitations of credit control by itself, with a view to establishing the point that, in general, a central bank would be well advised not to aim at more than what it considers to be capable of attainment at the time, with the aid of all the powers, facilities and instruments at its command and of all the compensatory or corrective measures which its Government is prepared and able to carry into effect. By attempting to achieve too much, a central bank runs the risk of further complicating the situation. Failure in the carrying out of a specific credit policy breeds distrust and uncertainty on the part of the public, and public distrust and uncertainty are fatal in the sphere of money and credit.

Yet in any ambitious scheme for the stabilisation of prices or of the business situation by means of credit control, not only prompt and effective but also continuous control would be essential.

Control of Price Level. With regard to the quantitative aspect

[1] *American Bankers Association Journal*, August, 1936.

of credit control, various assumptions have to be made before one can endorse the view of some economists that central banks have it within their power to control the level[1] of commodity prices by bringing about the requisite decrease or increase in the quantity of money according as price indices show or are estimated to show an upward or downward trend, with a view to promptly offsetting such trends. One must first assume that it is possible to construct indices of prices so accurately and appropriately that they can be used as an effective guide for the purpose in view; secondly, that there is a close and consistent relationship between the quantity of money and the price level, particularly in the sense of the former being the cause and the latter the effect; and thirdly, that central banks are always able to bring about the contraction or expansion of the quantity of money immediately and to the exact extent desired. In practice, however, not one of these assumptions is found to be fully valid.

The making of index numbers has made considerable progress in recent times and can, of course, be further improved upon from time to time; but since for the purpose of price control they are required to cover a completely representative range of commodities and services correctly weighted at any given time and to be made promptly available, they will always be subject to some degree of error. Other difficulties which can be mentioned here are, firstly, that prices are not uniform within a country, particularly if it is a country of wide expanse and varied climatic and other conditions; secondly, that different index numbers are required for different purposes; and thirdly, that a price index may tend to rise for no other reason than a rise in the prices of a few commodities owing to crop failures or some other cause of temporary scarcity, or that it may tend to fall for no other reason than a reduction in working costs per unit of output resulting from technical inventions and improved efficiency.

Moreover, there is no close or consistent relationship between the quantity of money and the level of commodity prices, and there are various reasons for this lack of correlation. To begin with, money is not the only medium that is used for the purchase of commodities, nor is it used only for the purchase of commodities. It is also employed in connection with the purchase of other objects, such as real estate, securities and services. For example, an increase in the volume of money may be accompanied by a

[1] The question of the particular level, at which commodity prices are to be stabilised or controlled, in itself raises a number of difficult points to settle

decline in the level of commodity prices, owing to a rise in the prices of securities and real estate; or a decrease in the volume of money may be accompanied by a rise in commodity prices, on account of a decline in the prices of securities and real estate. Lewinski[1] gave an example from Poland, where the quantity of money in circulation was halved between 1913 and 1925, while the index of wholesale prices rose by 36 per cent. The Stock Exchange index and the prices of immovable property, however, showed a considerable decrease. In the United States, during the years 1923-29, when an enormous expansion in the volume of bank credit took place, the level of commodity prices registered only minor fluctuations but the prices of Stock Exchange securities and real estate showed a sensational rise.

Another factor is the variable velocity of the circulation of money. The equations of the mechnical quantity-theory of money may be helpful as a means of explaining the existence of some relationship between the quantity and velocity of money, on the one hand, and the volume of trade and the price level, on the other; but they do not provide any clue to the solution of the problem of controlling the price level by controlling the quantity of money, since the other two factors of the equation, namely, the volume of trade and the velocity of the monetary circulation, are variable phenomena and do not easily lend themselves to control. The least that can be said at this stage of the discussion is that the quantity of money does not always operate as the sole or primary cause of changes in the price level, but frequently also represents in varying degrees the effects of changes in prices or in the volume of production, trade and speculation, or in the velocity of the monetary circulation.

The velocity of circulation of note or metallic currency or bank deposits is largely the resultant of human reactions, not only to monetary and economic phenomena but also to political phenomena and world developments generally. Ordinarily it tends to increase during periods of expanding business activity and rising prices, and to decrease during periods of declining business activity and falling prices. Sometimes these tendencies may be capable of being reversed by sharp changes in money rates, and not at other times. Sometimes also an increased velocity of circulation may be capable of being offset to a large extent by a contraction of bank credit, and a reduced velocity by an expansion of bank credit; but it has happened on various occasions in

[1] Op cit, pp 21-3

different countries that a contraction of bank credit was largely nullified by a further increase in velocity, and an expansion of bank credit by a further reduction in velocity. Thus, while the central bank can make allowances for the recognised tendencies of the velocity of circulation in determining its credit policy, it cannot always effectively counteract them, not only because the rate of increase or decrease in the velocity cannot be accurately predetermined, but also because there are other factors besides the quantity, cost and velocity of money which determine the price and business situation at any particular time

At various times non-monetary factors have been known to exert a great influence on commodity prices For example, climatic and crop conditions, wars, political or industrial upheavals, changes in production methods or in fashions, and waves of distrust and pessimism or confidence and optimism are liable to affect prices, sometimes even in a direction contrary to the movement of bank credit. There are some economists who, although they acknowledge the powerful influence of non-monetary factors on prices, nevertheless hold that they can be neutralised by monetary action At critical times, however, there are usually such complicated and divergent non-monetary factors at work that their influence and bearing on the price and business situation cannot be precisely determined and their effects cannot be wholly countered by monetary action. In attempting to do the impossible in such circumstances, central banks may set in motion other forces which may do more harm than good.

Furthermore, although many central banks have sufficient influence over money-market conditions in their countries to obtain the contraction or expansion of the quantity of money by employing the various weapons at their command, they cannot always bring about the contraction or expansion immediately or to the extent desired, owing to the various difficulties which may be encountered in credit control. It has happened on some critical occasions that the working of disturbing forces has seriously frustrated the efforts of central banks in this regard

If a central bank considers that there is a tendency towards overexpansion of credit in its country, as reflected in a tendency towards rising prices of commodities, securities or real estate and towards maladjustment between supply and demand, it may decide to counteract this tendency at an early stage by raising its discount rate and selling part of its holdings of securities and bills in the open market, and following this up with a further

increase in the rate and with further sales of securities if the initial steps had no effect, and even with 'direct action' and an increase in the minimum reserve requirements of the commercial banks as has sometimes been done in the United States. At certain times, however, all these operations together may not suffice to counteract promptly the tendency towards overexpansion of credit. The money market may have such an abundance of funds that no real credit stringency arises out of the central bank's operations. Or if some stringency with higher money rates does result, the prospects of business and speculation may appear sufficiently attractive for entrepreneurs, investors and speculators to induce them to make still greater use of credit notwithstanding the higher rates.

Similarly, if a central bank desires to counteract falling prices and shrinking business activity, it may lower its discount rate and buy securities and bills, and even lower the minimum reserves to be kept with it by the commercial banks; but while these operations will increase the potential credit-creating capacity of the commercial banks and may lower money rates generally, it does not follow that actual expansion of credit and of business will result therefrom. In fact, credit and business may undergo further contraction and prices a further decline in the face of the expansionist operations of the central bank, for the reason perhaps that confidence has been badly shaken by a series of events and that a pessimistic outlook prevails regarding business prospects and price movements. The period from 1930 to 1934 witnessed in most countries the utter failure of central banks by means of their credit policy and operations to offset the effects of distrust, pessimism, contraction and liquidation.

While quantitative control of credit has been shown to be beset with many difficulties when it is invoked for the purpose of continuous stabilisation of prices, it cannot be said that qualitative control is any better adapted for this purpose. In theory there is much to be said in favour of the qualitative approach being more scientific and logical than the quantitative, and in the perfect planned economy (which can hardly be expected under the one or other form of democratic control) there should be no doubt about the former approach being productive of more positive results than the latter. In an unplanned or imperfectly planned economy, however, the practical application of qualitative control as the principal medium of control offers greater scope for errors

of judgment, with cumulative and exaggerative effects on the price level, and has greater limitations generally than the quantitative approach.[1] The central bank can at least achieve a large measure of quantitative control directly through its own efforts and operations, whereas with qualitative control (whether in the form of rationing of credit or direct action or moral suasion, etc.) it can attain only very little by itself and has to rely mainly on the co-operation of the commercial banks and other credit institutions, which in turn also find it difficult to control the ultimate distribution and use of their credit.

The efficiency of the existing methods of control could, of course, be improved upon and new methods evolved in the future, and both central and commercial banks, individually and collectively, should explore all ways and means of improving their technique of quantitative and qualitative credit control. As matters stand at present, however, there is little prospect of effective credit control being achieved for the purpose of price stabilisation, except under favourable circumstances and for limited periods.

Is Price Stabilisation Economically Advantageous? With regard to the question whether, assuming that credit could be controlled effectively enough to stabilise prices, it would be economically advantageous to do so, the answer is not so simple as might appear at first sight. It is self-evident that the maintenance of a stable purchasing power of money must be a great advantage to mankind, but at various times there might be other considerations of policy which might be more conducive to the general economic interests of the countries concerned.

It must be borne in mind that price plays a very important part in economic life as a mechanism for facilitating adjustments and is a necessary instrument, in certain circumstances, for correcting wrong trends and restoring equilibrium. Some of the modern economists have, in their zeal for a stabilised price level, shown an inclination to underestimate the function of prices, but there are many in various countries who have continued to stress the underlying importance of price movements to the economic structure as a whole.

[1] Dunkman, who has submitted a carefully prepared case for qualitative control, considers that 'the quantitative approach offers no less difficulty than the qualitative' and that 'in fact, it presents more', but he admits that 'in view of the difficulties of controlling credit qualitatively, it is an interesting question whether credit can be controlled in an "unplanned" economy'. In this connection he quotes Sir Basil Blackett's opinion that 'a stable price level is impossible without planning in other economic and political fields' *Qualitative Credit Control*, pp 318-24

For example, Lewinski[1] has said that 'the price mechanism plays an important rôle in the adaptation of production to the wants of the community' and that 'an economic organism based on free competition of individuals could not accomplish its task if the pendulum of price changes were stopped'. Anderson,[2] in expounding his view that the disturbance of economic equilibrium is responsible for depressions, also emphasised that 'it is through price changes that a broken equilibrium is restored', and that 'competition has its drawbacks, but free competitive markets do not carry mistaken policies as far as governments or great combines carry them', since 'the early price changes which take place in competitive markets give early warning of maladjustments and permit early steps to be taken to correct them'. Ohlin[3] held, in turn, that 'a long term policy aiming at an adjustment of economic conditions will probably have to reckon with fluctuations in certain kinds of prices and certain kinds of production as being natural and in the long run useful changes in a progressive community'; and according to Jenny,[4] 'variations in prices are not without utility', since 'they permit the tempering of abuses, the checking of rash impulses,' etc.

Moreover, as Gregory[5] and Hayek[6] have pointed out, experience has proved that recurrent dislocations and grave disharmonies can emerge in the economic structure even when prices are stable. For example, the relatively stable level of commodity prices in the United States from 1923 till the beginning of 1929 was accompanied by a sensational boom in the stock and real estate markets, an inflation of bank credit and a tendency towards overproduction, and was followed by a severe slump not only in security and real estate prices but also in commodity prices. With regard to commodity prices themselves, a stable level does not prevent the occurrence of changes in individual price-relationships which tend to bring about disturbances of their own. In other words, a stable price level is no guarantee of economic equilibrium and of a normal and steady growth in economic activity.

Another factor of importance which is usually ignored in discussions on price stabilisation is the point, stressed by Greidanus,[7] namely, that under a stabilised price level the settlement of claims

[1] *Money, Credit and Prices*, p 70
[2] *Chase Economic Bulletin*, June, 1931
[3] *Svenska Handelsbanken Index*, December, 1933.
[4] *Lloyd's Bank Monthly Review*, June, 1933
[5] *The Gold Standard and Its Future* (Third Edition), p 163
[6] See *Prices and Production and Monetary Theory and the Trade Cycle.*
[7] *The Value of Money*, pp 207-8.

and debts with a constant quantity of goods does not involve a constant sacrifice, since such factors as plentiful harvests and an increased industrial output resulting from technical inventions and improvements would enable the producer to supply the same quantity of goods at a smaller sacrifice than in times of scarcity and adversity; and vice versa.

Business-Cycle Control. With regard to credit control as a means of controlling the business cycle, the central bank is confronted with the same difficulties as in the case of price stabilisation, namely, that the quantity of money is not the only factor influencing the volume of production and trade; that the central bank is not always able to bring about the contraction or expansion of the money supply immediately and to the extent desired; and that qualitative control of credit also cannot always be applied successfully.

Changes in the quantity of money frequently have a fairly close relationship with cyclical fluctuations in business activity, but not necessarily or primarily as 'cause'. Sometimes changes in the money supply represent nothing more than 'effect', and sometimes both 'cause' and 'effect'. There are times, however, when there is no such relationship and when changes in the velocity of the monetary circulation constitute the determining factor; and such changes may also operate as the cause or the effect of changes in business activity. In short, the quantity of money, the velocity of circulation, the volume of production and trade and the prices of commodities are all closely related, acting and reacting on one another; and while there are still adherents of the monetary theory of the trade cycle, it is generally recognised that cyclical fluctuations are caused by the action and interaction of various economic and non-economic forces.

Although the business cycle cannot be regarded as purely or predominantly a monetary phenomenon, there is no doubt that the credit policies and operations of banks, by their very nature, play an important part in economic fluctuations. Their operations may not usually be the causal factor, but they may at times constitute a substantial contributing factor. The least that can be said is that an expansion of bank credit can promote a boom, or that an undue contraction of bank credit can deepen a depression, which was originally set in motion by other forces; and similarly, other things being equal, that a contraction of bank credit can retard a boom, or that an expansion of bank credit can promote a recovery from depression. Whether banks are influenced by

undue optimism or pessimism, or by other forms of misjudgment, or by monetary ease or a credit strain resulting from a favourable or an unfavourable balance of payments respectively, their operations have an effect on the general business situation

A central bank should, therefore, aim at being able to determine not only the particular stage and relative trend of the business situation, but also the extent to which bank credit is responsible for the situation at any time as compared with the operation of non-monetary factors, since the relation between the two is important for the purpose of formulating the appropriate credit policy. The central bank can, directly or indirectly, influence the volume of bank credit, and although, as stated previously, it cannot always completely neutralise the effects of non-monetary factors by means of a suitable adjustment of the money supply and of short-term interest rates, it can at least achieve something in the desired direction.

The World Economic Conference of 1933, for example, recommended that central banks should endeavour to adapt their measures of credit regulation as far as their domestic position permits, to any tendency towards an undue change in the state of general business activity, and that an expansion of general business activity of a kind which clearly cannot be permanently maintained should lead central banks to introduce a bias towards credit restriction into their credit policy, while an undue decline in general business activity should lead them to introduce a bias towards relaxation. The difficulty is, of course, to decide the question of an 'undue change'. For such decisions the best guides are accumulated experience and personal discretion based on continuous observation of all the factors bearing on the business situation and speculative activity; and in this respect the task of central banks would be greatly facilitated if ways and means were devised for securing the active and rational co-operation of the commercial banks.

In recent times the emphasis has come to be placed on changes in money incomes rather than in the quantity of money as a primary cause of economic fluctuations, and, therefore, on the need for maintaining stability in money incomes in order to attain general economic stability It is also being more generally recognised that the stability of money incomes cannot be achieved by credit control alone, but that other measures are necessary to supplement such control.

In his *Treatise on Money*[1] published in 1930, Keynes had stressed the factor of disequilibrium between saving and actual investment being the primary cause of cyclical fluctuations in business activity. Unlike those economists who had a predilection for 'overproduction' or 'underconsumption' as the main cause, he did not assume that the whole of that part of the money income of the community which was not spent on the current consumption of goods and services, was always invested in the actual production of new capital goods. Whereas they had attributed the downward phase of the business cycle to the overproduction of capital goods resulting in a larger production of consumers' goods than the purchasing power of the public could absorb at the prevailing price level, Keynes considered that the cause was frequently to be found in a certain amount of saving which did not result in a correspondingly large amount of investment. This theory which was further elaborated by Keynes in his *General Theory of Employment, Interest and Money* (in 1936), has been accepted by many economists in various parts of the world.

While the appropriate monetary policy can do much either to avoid overexpansion of business activity due to undue extension of bank credit, or to counteract a tendency towards underinvestment, it is clear that such measures as fiscal policy and compensatory Government action, or perhaps some form of general control of investment, are needed to supplement monetary policy in any attempts to control the business cycle. Under the modern economic organisation, however, the business cycle has become a highly complex phenomenon; and although the oscillations of business activity have consistently been found to be cyclical and rhythmical, they have not been uniform in type or regular in duration. There has been something different about every business cycle, due to changes in fashions and in methods of production and distribution, changes in political ideologies and in international relationships, changes in human reactions, etc. In general, therefore, the most that could be achieved by the joint action of the central bank and the Government would be to reduce the amplitude of business fluctuations to the barest minimum attainable in the prevailing circumstances, i.e. to smooth out in contrast to completely eliminating the business cycle.

Stabilisation of Exchange Rates and Gold Standard. The stabilisation of exchange rates had in the past been associated more particularly with the maintenance of the gold standard,

[1] Vol I, pp 172-184

under which exchange rates could fluctuate only within very narrow limits, the so-called 'gold points', and since, during the sixty years ending in 1931, the gold standard was maintained by the great majority of countries, except for an interval caused by the war of 1914-18 and its aftermath and ranging from two to ten years in the case of some countries and from ten to fifteen in the case of others, it can be said that the pursuit of stable exchange rates was the principal aim of practical monetary policy during that period, and that it was carried out with a substantial measure of success. It broke down during that war, and again in 1931 and subsequent years, under the stress of highly abnormal circumstances and complications.

While prior to 1914 the gold standard was not such a perfect regulator nor such a completely automatic mechanism as is sometimes represented to-day, it did nevertheless operate with much greater efficiency and freedom than during the period after its post-war restoration. There is much to be said for the view that the successful functioning of the gold standard in the former period was accompanied by more favourable international political conditions and coincided with an approximate equilibrium of economic forces in the world at large, but it does not necessarily mean that this state of affairs was only the cause and not also the effect of the efficient functioning of the gold standard and the universal acceptance thereof as a regulatory and disciplinary instrument. In fact, this interaction or interplay of political, economic and monetary factors has a significance for the national and the international economy which is unfortunately not always fully recognised.

The only legitimate criticisms which can be made against the functioning of the international gold standard during the period 1873-1914 are, firstly, that it permitted substantial movements in the general price level to take place, and, secondly, that it caused frequent and considerable changes in the discount and other rates in the London money market and, to a smaller extent, in other money markets. In both cases the fault can be traced *inter alia* to the fact that too much reliance was placed on the beneficently automatic operation of the gold standard and too few and half-hearted attempts were made at managing the gold standard and neutralising the effects of gold movements. The downward trend of prices in the first half of the period under review and the upward trend in the second half were, in no small measure, the result of too close adherence to rigid gold-reserve

ratios and too great dependence on the available monetary gold stocks and the current world production.

During the years 1925-31 when the gold standard served as a more or less international standard, the general conditions were definitely unfavourable for any approximately automatic operation even of the gold-bullion standard as opposed to the gold-specie standard. There were the huge burdens of domestic war debts, the transfer difficulties and repercussions of international war debts and reparations, the increased economic nationalism with its numerous trade restrictions and prohibitions, the increased provisions for wage regulation and social insurance, the increased intervention and participation of governments in business and finance, and the various schemes for the artificial limitation of output. There were also frequent and large international movements of short-term funds. London served intermittently as the principal repository of such funds, a large portion of which represented fugitive capital, and in its capacity as international financier London became the victim of 'borrowing short and lending long'. International financial complications were aggravated at times by dual control and divided responsibility in monetary and exchange matters owing to the co-existence of two world money markets and international clearing centres (London and New York), while in addition France emerged as a third important creditor country playing a more active and more direct part in international finance.

Moreover, Great Britain had restored the gold standard in 1925 at the old parity which proved to be too high under the anti-deflationary trends of the economic and social policies which were followed at the time, while such countries as France and Belgium had resorted to excessive devaluation of their currencies, thereby causing further dislocation in international trade. Finally, some attempts were made at adjustment and management of the gold standard and the gold exchange standard to meet the changed and changing world situation, but these experiments were half-hearted and incomplete when the abandonment of the gold standard in Great Britain in 1931 was precipitated by the wholesale withdrawal of short-term funds from London.

What can be said, therefore, is that too little attention had been paid to the devising of measures for increasing the elasticity and adaptability of the mechanism of the gold standard, according as the economic structure became more rigid and complex. Moreover, insufficient efforts were made to secure international

co-operation in the administration of the gold standard for the purpose of pursuing broader economic objectives than the stabilisation of exchange rates.

Managed Currency. Managed currency thus came into favour as a result of the alleged defects of the gold standard. In accordance with the general interpretation of the term, 'managed currency' refers to a currency which is not convertible on demand into gold specie or gold bullion or gold exchange, but which is governed by some other principle or objective. It derives its designation not from the fact that it represents the only kind of money or monetary standard in which management plays a part, but the one in which deliberate management necessarily predominates. By its very nature, therefore, managed currency is at least more adaptable to a totalitarian than a democratic regime.

It has been said at times that the results of managed currency during the 'thirties in such countries as Sweden, Great Britain, the United States and Australia have proved that it can be successfully applied under modern conditions everywhere. It must be borne in mind, however, that whatever success was claimed by some as having been achieved in those countries was, apart from its being hotly disputed by many qualified observers in the countries concerned, only relative in time, place and degree and does not prove anything tangible from a general point of view.

Managed currencies offer wide opportunities for discretion and latitude by individual countries or currency areas in currency and exchange matters, and thus for uncertainties regarding the future course of exchange rates, all of which is not conducive to the engendering of the international confidence that is required for the smooth and efficient functioning of international trade and finance. In some cases, the necessary confidence in the stability of a managed currency may be created by faith in the solidity and wisdom of the Government and in the resources of the country. In the long run, however, the tendency towards spasmodic fear of political change, and of manipulation of a currency based on the will and discretion of the Government in power, is liable to undermine confidence in the general economic situation of such countries not only within their own borders but also, and perhaps to a much greater extent, in other countries.

While individual or regional managed currencies must, and can appropriately, play their part at times when no international monetary standard or system is functioning, they have serious

limitations in practice. As Burgess[1] said, 'there is no magic in monetary management which can absolve mankind from its political and economic sins'. If managed currencies are not to deteriorate into competitive currency depreciation and defeat their own ends, they require effective and continuous control of credit within their respective countries as well as close and continuous international co-operation The inherent difficulties in the way of complete credit control may, as stated previously, be overcome for short periods, and to a greater extent under totalitarian than under democratic regimes. In general, however, it is apparent that the maintenance of successful monetary management and international monetary co-operation requires a common link between currencies and a common instrument of economic and political discipline. Moreover, the ultimate failure of managed currencies can only aggravate the evils which they sought to cure.

The recognition of these facts by an increasing number of people in various countries explains the emergence of the International Monetary Fund as a means of re-establishing an international monetary system and maintaining exchange stability on the basis of fixed gold parities, subject to orderly adjustment where rendered necessary by fundamental disequilibrium.

General Observations. While the existence of limitations in regard to the scope and degree of credit control must be accepted as unavoidable in the modern complex economic organisation, it is clear that, whatever monetary standard or system is followed, central banks should seek individually and collectively to control credit to the extent that they can do so, whenever the economic interests of their respective countries can be bettered by means of such control. It is also clear that, where the control of credit by the central bank proves to be inadequate for the purpose of attaining the desired objective but can be advantageously supplemented by appropriate fiscal policy or other action on the part of the Government, the latter should take the necessary measures.

From the point of view of credit control, the central bank should aim at being able to determine approximately the extent to which bank credit is responsible for a given situation at any time as compared with the operation of non-monetary factors, since the relation between the two is very important for the purpose of formulating the correct credit policy. Another factor of importance to the central bank in connection with credit policy is to be able to determine the particular stage of the business cycle at any

[1] *American Barkers' Association Journal*, August, 1935.

time, with a view to deciding not only when to act but what to do and how far to go.

The central bank should also, by means of wise leadership and high-principled action, endeavour to secure the active and continuous co-operation of the commercial banks and to increase its moral influence over other financial institutions and the business community generally. With its leadership of the financial system well established and willingly accepted and its actions and warnings heeded by businessmen, because by experience they have found it to be in their interest to do so, the central bank has more than half its battle won. In addition, owing to the much wider sphere of Government operations under modern conditions, the central bank, as emphasised in Chapter III, now more than ever needs the co-operation and support of its Government in the carrying out of its credit policy in the national economic interest.

Moreover, in the light of past experience the control of credit should be directed towards the maintenance of stable exchange rates as well as towards the minimisation of fluctuations in business activity and in the general level of commodity prices, i.e. the avoidance at least of the extremes of booms and slumps and of inflation and deflation. The adoption of all these objectives as a conscious and important factor in monetary policy is dictated not only by theoretical considerations of appropriate monetary policy, but also by the needs of the world situation and the world state of mind.

With this object in view the central bank should endeavour, as far as possible, to insulate the internal credit structure from temporary movements in the balance of payments on current account or on capital account. The central bank should not follow an automatic policy but only allow changes in the balance of payments to have their effect on the credit situation and the level of money rates and prices, if it observes a definite trend resulting from some disequilibrium in the domestic economic structure or from some external influence. Contrary to the views of several economists, changes in interest rates and commodity prices must be recognised as necessary instruments for restoring equilibrium, since they operate in various ways to correct wrong trends. In other words, the suggestion sometimes made that the internal credit structure should be permanently insulated from movements in the balance of payments would tend to exaggerate the wrong trends and aggravate the disequilibrium.

The duty of implementing the combined objectives of mainten-

ance of fixed gold parities, smoothing out of the business cycle and minimisation of general price changes, to the fullest extent that these objectives were compatible with one another, would devolve, in the first instance, on the monetary authorities of the United States and Great Britain, whose financial markets and central banks play a leading rôle in world finance and operate in economies representing a preponderant part of the world economy, and the results of whose actions would, through the medium of stable exchange rates, be transmitted to other parts of the world. Their success would, apart from the political and economic situation, depend on the wisdom and efficiency of their monetary management as well as on the degree in which they could secure the co-operation of the monetary authorities of other countries. To attain this co-operation was one of the principal reasons for the establishment of the International Monetary Fund.

CHAPTER IX

DISCOUNT-RATE POLICY

Evolution of Discount-Rate Policy. The Bank of England was the first to develop the discount rate as an instrument of credit control. It used its discount rate (better known as Bank rate) for this purpose for the first time in 1839, and again in connection with the crises of 1847, 1857 and 1866.

During this period the Bank gradually developed in the direction of accepting the position of being the 'lender of last resort', and such methods as credit rationing and shortening the currency of eligible bills, which were previously adopted as a means of protection in a crisis, were clearly difficult to reconcile with the duty and responsibility of the lender of last resort. This responsibility implied that the Bank had to meet all reasonable demands for accommodation in an emergency, and that it had, therefore, to protect itself and safeguard its gold reserve by raising its rates of discount and interest with a view to confining the demands for accommodation to those which were most urgent and necessary, and so reducing the ultimate demand for credit.

From its experience with the crises mentioned above, the Bank derived two lessons which became part of its traditions and were subsequently adopted by practically all central banks as a *sine qua non* of discount-rate policy. The first was that the central bank should not wait too long before applying a restrictive credit policy, since the trend of credit expansion and speculation could not easily be reversed after it had gained sufficient momentum, particularly if it had been stimulated by a period of cheap money. In 1847 the Bank raised its rate too late and too slowly to be promptly effective; and while in 1857 and 1866 it was quick to raise its rate when there was an actual outflow of gold, it still proved to be tardy in using Bank rate for checking any tendency towards undue credit expansion[1] and speculation.

[1] The danger of undue credit expansion, apart from detrimental domestic repercussions, is that it will sooner or later lead to an unfavourable balance of payments and a drain on the country's gold reserve

The second lesson was that a financial panic could, in certain circumstances, easily be brought about by a fear of inability to obtain the required banking facilities, and that it could be promptly allayed by the assurance that all legitimate requirements would be met at a rate. In 1847 and 1866 the Bank did not actually find it necessary to avail itself of the authority to increase its fiduciary note issue beyond the limit imposed by the Bank Act. The mere fact that money would be available, if required, proved to be sufficient to relieve the tension and cause the panic to subside.

In the meantime important changes had taken place in the nature of the Bank rate. In 1845 the practice of the minimum rate was introduced and an elastic credit policy[1] was adopted. In that year it was announced by the Bank that the published rate would be applicable only to first-class bills[2] of a given maximum currency, while in the case of other bills the rate would vary with their currency and their quality.[3] The principle of an elastic or fluctuating Bank rate, as well as of differential rates with Bank rate as a published minimum, was maintained throughout and became part and parcel of Bank-rate policy.

Other accepted features of Bank rate were that it should normally be above the market rate, since the Bank was to be the ultimate source of credit to be exploited only when all outside sources had been tapped and since Bank rate, therefore, served the purpose of a penalising rate, and that while Bank rate might lead the market rate upwards either as a general warning or for the specific purpose of credit contraction, it should ordinarily be content with following the market rate downwards.

The Bank's policy of normally fixing Bank rate above the market rate meant in practice that the Bank did not get much discount business except in emergencies, and also that its own customers had a legitimate grievance. Accordingly, in 1878 the Bank announced that it would no longer consider itself bound to adhere to its published rate when discounting for its own exclusive customers, but would discount for them at or near market rate.[4] This was not, however, tantamount to a revival of competition, as the Bank's customers were limited in number. At the same time it was understood by the discount market that it could rely upon the Bank for accommodation not only in times of crisis,

[1] For example, the rate varied from 2½ per cent. in 1844-45 to 10 per cent. in 1857 and 1866

[2] Bearing at least two good names, one of which had to be a London acceptor

[3] King *History of the London Discount Market*, pp 109-12

[4] Ibid., p. 295.

but also on any occasion of temporary stringency or strain.

The Bank's position as the central institution of the British financial structure was now firmly established, and its functions of leadership and regulation of the money market were more generally understood and recognized. After the crisis of 1866 there was no occasion on which it was found necessary to resort to the suspension of the Bank Act until the outbreak of World War I. In 1890, for example, when the failure of Baring Brothers created a serious emergency, the Bank raised its rate to 6 per cent.; and realising the potential repercussions of such a failure, it also undertook, in co-operation with other English banks and financial houses, to guarantee the payment at maturity of all obligations of the failing house, as a result of which the Bank succeeded in allaying public alarm and averting a general panic With regard to the crisis of 1907, which was brought about by the financial panic in the United States and showed the vulnerability of London as an international financial centre with a free gold market, the raising of Bank rate from 4½ to 7 per cent within a week proved to be effective in meeting the emergency and restoring equilibrium within a relatively short period.

During this period the Bank resorted to various other methods in the performance of its regulatory functions, such as borrowing from the London market, raising its buying and selling prices for gold within certain limits, and arranging for or accepting credits from France and Russia. In general, however, Bank rate was relied upon as the main instrument of regulation.

Influence on Other Central Banks. The experience of the Bank of England with its discount-rate policy, and the theory underlying it, were widely discussed in the other countries of Europe about the middle of the nineteenth century.

In 1857 the Bank of France began to adopt the Bank of England practice of raising the rate of discount for the purpose of stopping a drain on its gold reserve. Others followed suit, and in due course the use of the discount rate as an instrument of control became general, but nowhere was it employed to such an extent and with such frequency as by the Bank of England

The Bank of France, for example, deliberately followed a policy of making a minimum of changes in the discount rate and keeping such changes within a relatively narrow range. Between 1844 and 1900 it changed its rate only 111 times, compared with 400 changes in the rate of the Bank of England, and between 1901 and July, 1914, the alterations in their rates numbered 10 and 66.

respectively.[1] Moreover, in times of emergency the former did not raise its rate as high as the latter usually did. In the crisis of 1907, for example, the Bank of France raised its rate from 3 to 4 per cent., while the Bank of England advanced its rate from 4½ to 7 per cent. within a week. In 1866 their rates had ranged between 3 and 5 per cent. and between 3½ and 10 per cent. respectively, and in 1873 between 5 and 7 per cent. and between 3 and 9 per cent. respectively.

In 1877 the Bank of France adopted the policy, which was subsequently adhered to, of charging a premium on gold when it was called upon to deliver gold in redemption of its notes. As Conant[2] said, 'this means of protecting its gold reserve has been treated by the bank in some measure as a substitute for raising the rate of discount in a monetary pressure, and while it protects the gold of the bank it has none of the advantages upon the money market which follow the different policy of the Bank of England' Dunbar[3] pointed out that the consequence of the gold premium policy in depriving Paris of the place which it would otherwise have occupied among the international money markets was recognised in France, but it was regarded as 'not too high a price to pay when account is taken of the benefit of the low stable rates to the large number of small-scale producers and dealers which is still a characteristic feature of French economic organisation.'

In general, the Bank of England stood at the one end, with the greatest frequency and the widest range of changes in rates of discount, and the Bank of France stood at the other end, with the smallest frequency and the narrowest range.[4] In between these two came the Reichsbank, Netherlands Bank, Riksbank of Sweden, National Bank of Belgium, etc., with varying degrees of frequency and range.

The Reichsbank, in particular, followed the fluctuating rate policy of the Bank of England, with high rates at times, rather than the relatively uniform rate policy of the Bank of France. According to Loubet,[5] the Reichsbank changed its discount rate 84 times between 1875 and 1900 compared with 167 in the case of the Bank of England and 25 in that of the Bank of France. More-

[1] Palgrave: *Bank Rate and the Money Market*, p 151, and Hawtrey: *A Century of Bank Rate*, Appendices I and IV.
[2] *History of Modern Banks of Issue* (5th Edition), p. 65.
[3] *Theory and History of Banking*, p 192.
[4] This relative position remained approximately the same till recent years.
[5] *La Banque de France et l'Escompte*, Appendix E (quoted by Andréadès, p. 315).

over, its rate was as high as 9 per cent in 1866, 8 per cent. in 1870, and 7½ per cent. in 1907.

Reasons for Frequency of Changes in Bank of England Rate. The main reasons for the record frequency of changes in the rate of the Bank of England prior to 1914 may be briefly summarised as follows:

In the first place, London had developed into the world's financial centre, with a free gold market and a well-developed discount market, discounting and accepting bills drawn in any part of the world and affording opportunities for the investment of foreign short-term capital. Under these conditions the Bank of England as the central institution was rendered highly vulnerable and sensitive to complications and disturbances anywhere in the world, and was subject to large and sudden demands for accommodation and export of gold. The general opinion in England at the time was, however, that the advantages derived from London's position as the world's financial centre and a free gold market far outweighed the disadvantages connected therewith.

Secondly, the gold reserve of the Bank of England was, as a rule, comparatively small in relation to the size of the British credit structure and the huge volume of business and financial transactions conducted through London Frequent references were made to the inadequacy of the Bank's gold reserve as one of the principal reasons why the Bank had to change its rate so frequently and to maintain such high rates at certain times. The magnitude of the gold reserve of the Bank of France, on the other hand, was held up by many as the main factor responsible for the relative uniformity of its rate and its lack of sensitivity to external factors.

Thirdly, foreign trade played a relatively important part in the economy of Great Britain, and the investment of British capital in other countries became a factor of great significance in world economy. The spread of British rule and influence over a large portion of the globe, the active spirit of British business enterprise, and the profitable opportunities for such enterprise in large undeveloped areas in various parts of the world exercised an undue drain at times on the capital and banking resources of Great Britain.

Theory Underlying Discount-Rate Policy. The theory underlying the use of the discount rate as the principal instrument of credit control under the gold standard was, briefly, that changes in the discount rate of the central bank would bring about more or less corresponding changes in local money rates generally, and

that such changes in money rates would, through their operation on the supply of and demand for money and credit and on the international flow of capital, have the effect of re-adjusting the domestic levels of prices, costs, production and trade, and correcting any disequilibrium in the balance of payments.

A definite trend in the outflow of gold from any country would indicate lack of equilibrium in its economy, and would aggravate the ultimate difficulties if allowed to continue unchecked. This disequilibrium would ordinarily be reflected in either (1) maladjustment between imports and exports of merchandise whether caused by relatively high domestic costs of production discouraging exports and encouraging imports, or by a tendency towards heavy buying and stocking of imported goods owing to the increasing domestic demand, or (2) excessive outflow of capital due to over-investment in foreign countries or withdrawal of foreign balances or flight of capital caused by fears regarding the currency and other factors, or, in the case of debtor countries, cessation of the inflow of new capital.

Whatever the nature of such disequilibrium, the most prompt and effective corrective under the gold standard was found to be a substantial rise in money rates and contraction of credit, with the following results: liquidation of commodities and securities, contraction of domestic demand, decline in investment and speculative activity, lower prices, lower wages, etc. This course of events in the country concerned would normally have the effect of encouraging exports and discouraging imports, while the higher money rates would tend directly to attract foreign capital and to discourage the withdrawal of foreign balances or the remittance of foreign bills to that country for discount. In due course, the period of time depending upon various circumstances, the operation of these factors would restore equilibrium. If the corrective measures were maintained long enough, they would not only stop the outflow of gold but even reverse the flow and bring about recovery of the gold lost, which would in turn relieve the credit stringency, reduce money rates, and revive general business activity.

On the other hand, a continued inflow of gold of large dimensions would tend to sow the seeds of disequilibrium through its operation on the credit structure of the receiving country. It would have the effect of cheapening money and encouraging the further expansion of credit, trade, production, investment and speculation, which would in turn tend to raise the domestic level of prices and costs and to encourage investment in foreign countries,

until an adverse balance of payments was established and gold began to flow out again.[1]

For its successful application, therefore, the theory underlying discount-rate policy required, firstly, that the discount rate of the central bank should have a prompt and decisive influence on money rates and credit conditions within its area of operation, particularly when it was desired to raise money rates and contract credit; secondly, that there should be a substantial measure of elasticity in the economic structure in order that prices, wages, rents, production and trade might respond to changes in money rates and credit conditions; and thirdly, that the international flow of capital should not be hampered by any arbitrary restrictions and artificial obstacles.

Relationship between Official Discount Rate and Money Rates. A close relationship between the trend of the official discount rate (i.e. of the central bank) and that of at least short-term money rates could be established by means of an active and well-organised money market working on a narrow margin and depending upon the central bank for accommodation in times of heavy seasonal strain or intense business activity, as well as by means of traditional conventions and general recognition of the leadership of the central bank.

In Great Britain both these factors operated in the past to make Bank rate effective, although in general discussion much more stress was laid on the former than on the latter factor The Bank of England was generally described as the regulator and controller of the London money market, where operations were conducted on such a scale and organised so finely that dealers and brokers were 'forced' into the Bank with every appreciable change in credit conditions, whether originating from the side of supply or demand. The Bank was always ready to grant the necessary accommodation to the market, even in cases of acute stringency. If, however, it considered that the demand for accommodation arose not from a temporary seasonal emergency but from some disequilibrium in the economic structure, whether caused by internal or external forces, it would raise its rate much or little, or for a second and third time in quick succession, depending upon its interpretation of the extent of the disequilibrium and upon the reaction of the money market and also other

[1] In particular the prices of goods and services produced by sheltered industries or by protected industries which, owing to internal competition, would not quote prices equal to landed costs of similar imported goods except in times of intense business activity

markets or other countries As in the case of other prices, the marginal theory applied to the discount rate in such circumstances, Bank rate for the marginal discounts determining the rate for discounts as a whole.

As previously mentioned, Bank rate was usually higher than the market rate of discount in London and somewhat in the nature of a penalising rate, the Bank of England being the supplier of credit resorted to only after all outside sources had been tapped. But as soon as a credit strain developed and the market had to seek accommodation from the Bank, the market rate of discount for bills eligible for rediscount at Bank rate was forced up to the level of that rate; and this process was, of course, repeated in the case of other types of bills for which the Bank quoted higher rates, depending upon their currency and quality.[1]

While the relationship between Bank rate and the market rate of discount was determined primarily by money-market conditions, that between Bank rate and other money rates was based largely on traditional conventions and recognition of the leadership of the Bank. In accordance with traditional conventions, the clearing banks in London followed the practice of providing for an agreed margin between Bank rate and the rate of interest which they paid for deposits subject to seven days' notice Their deposit rate was generally fixed at 1½ per cent below Bank rate The call rate in turn was usually fixed at ½ per cent. above the deposit rate, as the banks required some margin of profit for themselves between the rate paid on deposits and that charged by them on their call loans to the market With regard to the rate charged by the banks on advances to their customers, a margin of 1 per cent. above Bank rate was ordinarily maintained, subject to a minimum of 5 per cent

These conventions were not of the nature of hard-and-fast rules. There were occasions on which deviations from the conventional practice took place, but in general there definitely prevailed a strong tendency to observe the traditional relationships between Bank rate and the rates quoted by the clearing banks for deposits, call loans and advances; and as the call loans from the banks to the discount market usually represented the greater part of the funds employed by the latter, the call rate had some influence on the market rate of discount.

In short, as a result of the narrow margin on which the London

[1] For short-term collateral advances to the market the Bank charged ½ per cent. above Bank rate.

money market worked and with the aid of traditional conventions, the Bank of England was placed in a position to fulfil its function as the regulator of the money market and the controller of credit with a substantial measure of success At various times, however, owing to large foreign balances or for other reasons, the money market was in a highly liquid state, and the Bank had to resort to some form of open-market operations in order to withdraw funds from the market and make its rate effective.

Furthermore, prior to 1914 the economic structure of Great Britain had an appreciable degree of elasticity which permitted of prices, wages, rents, production and trade responding to changes in money rates and credit conditions; and there were no arbitrary restrictions on the international flow of capital and the readjustment of international money rates.

Whatever success the Bank of England had with its discount-rate policy in those days was also of great significance to the world as a whole. London was the world's clearing house and the only real international money market at the time, as a result of which the monetary as well as the general economic tendencies in Great Britain were, through the medium of stable exchange rates under the international gold standard, transmitted in due course and in varying degrees to practically all other parts of the world.

With regard to other countries, the relationships between the official discount rate and money rates generally were different in scope and degree from those in Great Britain, as the monetary and banking conditions outlined above were peculiar to that country and to London as its financial centre In those countries which had central banks at that time the discount rate was used as an instrument of control; and it was, in one way or another, part of their policy to take an active part in rendering the monetary and credit conditions in their respective countries more responsive to changes in the discount rate. In general, however, their discount-rate policy did not prove as effective a weapon as in the case of the Bank of England.

In the first place, none of the other countries had such an active and well-organised money market. There was, for example, no real discount market in these countries. The commercial banks discounted bills for their own customers and the central bank rediscounted bills for the commercial banks, besides discounting for their own customers, as was particularly the case with the Bank of France and the Bank of Italy. The rates of these central

banks could be used as a means of raising money rates generally whenever the commercial banks within their areas of operation were forced by circumstances to rediscount with them; but changes in money rates in their countries did not usually have such prompt effects as in Great Britain, since their economic structure was less elastic and their credit organisation less sensitive.

Secondly, while certain conventions in respect of interest rates were in vogue in some of those countries, they were not so pronounced or semi-automatic as in Great Britain. Nor was the psychological reaction on the part of trade, industry and the public such an important factor as in Great Britain.

Thirdly, the other central banks had less necessity than the Bank of England for the use of the discount rate as a means of protecting their gold reserves. On the one hand, they had relatively larger reserves at their disposal, taking into account the volume of business and financial transactions in their countries and their less vulnerable position in general; and on the other hand, many of them also resorted to other methods of protecting their gold reserves The central banks of Germany, Holland, Belgium and Denmark, for example, followed a policy of holding foreign exchange as their first line of defence of exchange rates. Writing about the Netherlands Bank, de Jong[1] said that 'the effect of the foreign bill policy in stabilising the Bank rate cannot, of course, be expressed in exact figures', but 'by way of illustration it may be mentioned . . . that, whereas the official discount rates of the Bank of England and the German Reichsbank had been altered during the years 1894 to 1913 (inclusive) 90 times and 73 times respectively, the Netherlands Bank's discount rate for bills had been changed only 36 times in the same period.' The Bank of France, on the other hand, adopted the practice of charging a premium on gold when it was called upon to redeem its notes in gold for export, and it could, as in the case of other countries on a limping standard, redeem its notes in legal-tender silver coin under certain conditions.

Discount-Rate Policy since 1914. After 1914 there were again various occasions on which the central banks of different countries employed the discount rate as an important instrument of credit control; but in general its importance as such tended to decline absolutely as well as relatively to other methods of control.

The Bank of England, for example, after raising Bank rate to

[1] Willis and Beckhart *Foreign Banking Systems*, p 744

10 per cent. on August 1st, 1914, lowered it to 5 per cent. a week later and maintained it there, except for a period of nine months in 1916-17 when it was 6 or 5½ per cent., throughout the war and for a year after the cessation of hostilities. It was raised to 6 per cent. in November, 1919, and then to 7 per cent. in April, 1920, in an attempt to check the post-war inflation which had been steadily gaining momentum. After deflation had set in, the Bank began in April, 1921, to lower its rate in stages of ½ per cent. at a time to 3 per cent. by July, 1922; but with the first signs of a general revival of business activity it was raised to 4 per cent. in July, 1923, while the further rise to 5 per cent. in March, 1925, was connected *inter alia* with the contemplated return to the gold standard. Except for a few months during the second half of 1925, the rate was kept at 5 per cent till April, 1927, when as a result of a moderate recession it was reduced to 4½ per cent. and maintained there until the expansion of business activity, combined with heavy speculation in New York and an outflow of capital from London, caused an increase in the rate to 5½ per cent in February, 1929, followed by a further rise to 6½ per cent. in September of that year.

The turning point was marked by the Wall Street crash in October, 1929, when Bank rate was promptly lowered to 6 per cent, and then to 5 per cent. by the end of the year. With the development of a serious trade depression and easier monetary conditions, the rate was further reduced in four stages to 3 per cent. by May, 1930, and to 2½ per cent. in May, 1931. In July, 1931, however, it was raised to 4½ per cent. in two stages on account of the financial crisis in Central Europe, followed by a further rise to 6 per cent. in September, 1931, when Great Britain was forced to suspend the gold standard as the result of a flight from sterling and a substantial loss of gold. In February, 1932, the Bank could again begin to lower its rate, first to 5 per cent. and then in five stages to 2 per cent by June, 1932.

It will be observed, therefore, that, as compared with 167 changes in its rate during the period 1875-1900 and 66 changes between January, 1901 and July, 1914, the Bank of England altered its rate only 34 times between 1919 and 1932; and of these 34 changes 10 occurred in 1931 and 1932, the last six consisting of reductions in stages from 6 to 2 per cent. Moreover, the highest rates reached during this period were 7 per cent. in April, 1920—April, 1921, 6½ per cent. in September—October, 1929, and 6 per cent. in September, 1931—February, 1932, thus also showing

a declining trend.

During the period 1919-32 the Bank of France altered its rate only 17 times, but the Federal Reserve Bank of New York made 34 changes in its discount rate, as in the case of the Bank of England, although they did not always occur at the same time or in the same degree. With regard to the Reichsbank (which had maintained its rate at 5 per cent. between December, 1914, and July, 1922, and thereafter raised it in various stages during the hyperinflation period to 30 per cent. by August, 1923, and 90 per cent. between September and December, 1923, and which was also compelled by a financial crisis to raise its rate in three stages from 5 to 15 per cent. in June—August, 1931), there were 36 changes in its discount rate between 1919 and 1932, which represented the highest number of rate changes of any central bank during that period.

After 1932, however, official discount rates were, with few exceptions,[1] used in conjunction with other methods to maintain a cheap-money policy; and notwithstanding the waging of a costly and devastating war over a large part of the world, the discount rates of most countries directly or indirectly involved in the war stood at the same or a lower level *after* the war than during the cheap-money period which preceded it. Except for brief periods of 35 and 28 days during August—October, 1939, when as a result of disturbances preceding and following the outbreak of war in Europe the rate of the Bank of England was 4 and 3 per cent. respectively, it was maintained unchanged at 2 per cent. from June, 1932, to November, 1951, while the Federal Reserve Bank of New York kept its discount rate at 1 per cent., the lowest figure in history for any central bank, from August, 1937, to January, 1948. The Bank of France, which had reduced its rate from 3 to 2 per cent. in 1939, lowered it further to $1\frac{3}{4}$ per cent. in 1941 and $1\frac{5}{8}$ per cent. in January, 1945; the National Bank of Belgium reduced its rate from $2\frac{1}{2}$ to 2 per cent. in 1940

[1] During the three years preceding the outbreak of war in 1939, the only central banks which made specific use of upward as well as downward changes in their discount rates were the Bank of France and the National Bank of Belgium In the case of the former, for example, the rate was raised from 3 to 5 per cent in September, 1936, on the eve of the suspension of the gold standard in France, but was restored to 3 per cent within a week and then reduced to 2 per cent within another fortnight, it was raised again to 4 per cent in January, 1937, and to 6 per cent in June of that year, it was then lowered in successive stages until it reached $2\frac{1}{2}$ per cent in May, 1938, and after an increase to 3 per cent in September, 1938, it was reduced by January, 1939, to 2 per cent. In the case of both these central banks, the increases in the discount rate during that period were occasioned by confidence crises and the flight of capital arising out of political crises.

and 1½ per cent. in January, 1945; the Reserve Bank of New Zealand lowered its rate in various stages from 4 per cent. prior to the war to 1½ per cent, in 1941, and the Bank of Canada from 2½ to 1½ per cent. in 1944; and the Netherlands Bank and the Riksbank of Sweden, after raising their rates at the beginning of the war, lowered them again to 2½ and 3 per cent. respectively in 1941, the latter being further reduced to 2½ per cent. in February, 1945. The National Swiss Bank, moreover, has kept its rate unchanged at 1½ per cent. since November, 1936.

This state of affairs concerning the discount rates of a large number and variety of central banks reflected a continuation of a public policy of cheap money wherever possible, even under the abnormal strain of war conditions; and it was rendered possible by the extensive creation of central bank credit, which again permitted of the further creation of commercial bank credit, and by the rigid control exercised by the Governmental and central banking authorities over the exchange, money and capital markets.

Towards the end of 1946, however, a gradual revival of discount-rate policy began to take place, due to the continuation of severe world-wide inflation of prices and costs and the growing realization by Governments of their inability to stop the inflation with non-monetary measures. The National Bank of Belgium was the first to raise its rate, namely, from 1½ to 2½ per cent. in November, 1946, to 3 per cent. in December, 1946, and 3½ per cent. in August, 1947. The only other countries where the discount rate of the central bank was used as a deliberate and positive instrument of credit control prior to 1949 were France, Italy, Western Germany, Finland, Greece and Ecuador. After September, 1949, the inflationary effects of devaluation in the countries concerned and, subsequently, of the Korean war, made more and more countries realize that a general rise in money rates was essential to reinforce the restriction of credit by regulation or moral suasion. The result was that, in conjunction with other measures, official discount rates were raised in an increasing number and variety of countries. This reorientation of monetary policy will be further discussed in Chapter XVI.

Special Position of Federal Reserve Banks. When the Federal Reserve Banks of the United States commenced operations in 1914, they tended strongly towards the adoption of the Bank of England's technique of credit control, namely: extensive use of discount-rate policy, with the aid of open-market operations when necessary for the purpose of making their rates effective; encour-

agement of an active money market, including a free and well-organised discount market on the lines of the London market, which would be responsive to changes in credit conditions and in official discount rates; and adoption of the gold-reserve ratio as the principal guide to discount-rate policy.

Realising its importance as a basic factor in the technique of credit control in a major country, the Federal Reserve Banks took an active part in promoting the establishment of a well-developed money market in New York, with four different sections: the market for bankers' acceptances; the market for commercial paper; the market for short-term Government securities; and the call loan market. They were particularly interested in the development of the markets for bankers' acceptances and short-term Government securities and rendered this possible by declaring themselves ready at all times to buy such acceptances and securities from any bank, discount house or bill dealer,[1] and by quoting favourable rates for such paper. The development of an active money market as a field for central bank policy was particularly important for such a country as the United States, with its rich natural resources of great variety, its large population, its wide scope for enterprise and speculative activity, and its thousands of independent unit banks. In due course subsidiary money markets were established in some of the other Federal Reserve Bank centres, such as Chicago, Boston and San Francisco, while that of New York developed into an international money market of great importance, representing a good second to the London market and exerting at times a profound influence on the latter.

A different relationship between official discount rates and other money rates was, however, set up in New York as compared with London, due mainly to different conditions. In Great Britain, the banks did not directly approach the Bank of England for accommodation but called up their loans to discount houses and bill brokers, who were then forced to sell bills to the Bank or borrow from it, whereas in the United States the member banks dealt directly with their Reserve Banks. Moreover, the discount rate of the Bank of England was a minimum rate applied only to first-class bills, equivalent in general to bankers' acceptances in the United States, whereas the discount rate[2] of a Federal Reserve

[1] The Reserve Banks also bought acceptances from bill dealers subject to re-purchase by the dealers within 15 days, for the purpose of tiding them over temporary pinches in the market

[2] Apart from the discount rate the Federal Reserve Banks quoted a buying rate for bankers' acceptances dealt with in the open market, and this rate was naturally

Bank applied to the promissory notes of bank customers endorsed by the borrowing member banks, or to the short-term collateral notes[1] of the member banks themselves. Thus, while the discount rate of a Federal Reserve Bank was, as that of the Bank of England, above the market rate of discount for bankers' acceptances, it was not as a general rule above the market rate for commercial paper (i.e. promissory notes dealt with in the open market).

Burgess,[2] however, pointed out that the commercial paper which a member bank brought to a Reserve Bank for rediscount was different from open-market commercial paper, since it had a bank endorsement, carrying with it the assumption by the member bank of the risk of non-payment. From his outline one was encouraged to conclude that, if due allowance were made for the value of the bank endorsement on such commercial paper, the discount rates of the Reserve Banks could not be regarded as having been below the market value of the paper discounted, and that, therefore, the American central banking practice was not far removed from the British axiom that Bank rate should ordinarily be above the market rate of discount. Burgess admitted, on the other hand, that 'it is a fair question whether a slightly higher discount rate—more in the nature of a penalty rate—might not have been better', since 'access to the Reserve Banks may have been a little too easy'.

In general, there was a fairly close correlation between the trends of the discount rate of the Federal Reserve Bank of New York and the open-market rates for commercial paper and bankers' bills, the discount rate moving as Burgess said, 'within a ribbon whose borders are the commercial paper rate and the bill rate'. As in London, the rate for short Treasury obligations in New York was usually lower than that for bankers' bills.

With regard to the rates charged for call loans or for the accommodation extended by member banks to their ordinary customers or the rates paid for deposits, there was no fixed practice and there were no conventional relationships of the types prevailing in Great Britain. Moreover, the call rate in New York was an entirely different phenomenon from that in London. While

ower than the discount rate and frequently as low as the market rate for the purpose of assisting and maintaining a bill market In recent years the Federal Reserve Banks have also quoted rates, with various margins above the discount rate, for advances to member banks against security other than eligible paper or Government securities or for industrial advances, or for advances to the public against Government securities

[1] Based on eligible paper or Government securities.

[2] *Reserve Banks and the Money Market*, Revised Edition (Harper), pp. 225-7.

in the latter it was applied primarily to loans from banks to the discount market and was, for obvious reasons, usually between the bank deposit rate and the market discount rate, in the former it was related principally to loans from banks to the Stock Exchange, whether for their own account or 'for account of others', and was for that reason not always closely associated with other money rates, as it depended largely on the volume of speculative activity on the Stock Exchange

As their principal guide to discount-rate policy, the Federal Reserve Banks originally decided to adopt the gold-reserve ratio. In due course, however, a continuous inflow of gold of large dimensions, arising out of the abnormal conditions in the world caused by the war of 1914-18, rendered the reserve ratio unsuitable as the principal guide to the credit policy of the Federal Reserve System, which then had to rely on a general survey of the economic situation and continuous observation of certain special factors which were found by experience to have a strong bearing on credit conditions and policies.

During the period of American participation in that war, and for some time thereafter, the discount-rate policy of the Federal Reserve System had to conform to the needs of the State, as was the case with the Bank of England and the central banks of other belligerent countries The Federal Reserve System was called upon to make large advances to member banks against their promissory notes covered by Government securities, and the expansion of Federal Reserve credit was even facilitated by making such advances against Government securities at interest rates equal to or lower than those carried by the securities themselves.

In 1920 a policy of deflation was adopted, as in Great Britain. The discount rate of the Federal Reserve Bank of New York, for example, which had already been raised from 4 to 4¾ per cent. in November, 1919, was further increased to 6 per cent. in January, 1920, and to 7 per cent in June, 1920, where it was kept till May, 1921.

After 1920 the Federal Reserve Banks had a good deal of experience with discount-rate policy, but the general consensus of opinion both in and outside the United States was that their discount rates proved, as a general rule, to be a far less effective weapon than the rate of the Bank of England. This deficiency could be attributed to various factors, such as the absence of conventional relationships between the official discount rate and certain money rates, the existence of surplus gold reserves during

the greater part of their career, the wide scope and strong inclination for speculative activity in the United States, and the lack of independence on the part of Federal Reserve Banks in the matter of fixing discount rates.

Changes in discount rates of the Federal Reserve Banks were always subject to the sanction of the Federal Reserve Board, which was subsequently reconstituted as the Board of Governors of the Federal Reserve System. On various occasions, the Board declined to sanction increases in discount rates proposed by Federal Reserve Banks. Between 14th February and 23rd May, 1929, according to the testimony of the Governor of the Federal Reserve Bank of New York before the Glass Sub-Committee of the United States Senate in 1932, that Bank had unsuccessfully approached the Board no less than ten times for approval of proposed increases in discount rates.[1] It is difficult, however, to estimate to what extent the discount-rate policy of the Federal Reserve Bank of New York would have achieved greater success if it had been entirely free to fix its rates as it thought fit.

Another factor which has been enumerated as having militated against the effectiveness of discount-rate policy in the United States, is the absence of the Bank of England practice of a penal rate of discount. According to Beckhart[2] 'the consensus of opinion among students of the subject here (United States) or abroad is that the Bank rate should rule higher than the market on each of the several types of paper discounted by the system'; and according to Gregory,[3] 'an important section of American opinion holds that the rate charged by the Reserve Banks should be a penal rate: that, in other words, the rate should be kept above the rates ruling, not only in the open market, but also above the rates ruling at the commercial banks for "over-the-counter" discounts'. Gregory's own conclusion is, however, that 'it is the tendency of reserve rates to follow, rather than to precede, market rates which should be criticised, rather than the tendency of reserve rates to be below market rates'.

[1] Burgess also referred to this matter, saying that 'just as in 1919 there had been a difference of opinion between the Reserve Banks and the Treasury as to discount-rate policy, so early in 1929 there was a difference of opinion between the Reserve Banks and the Washington Board', and that 'with this difference of view, fully effective action was not taken promptly enough' Op cit, p 283 The Board had favoured the taking of 'direct action' by the Reserve Banks against those banks which had made or were making heavy loans against Stock Exchange securities, rather than the raising of the discount rate which would have tended to make money dear for trade and industry as well as the Stock Exchange

[2] *Discount Policy of the Federal Reserve System*, p. 510.

[3] *Gold, Unemployment and Capitalism*, pp 135 and 137.

In conclusion, it may be mentioned that, in the opinion of various writers, the discount-rate policy of the Federal Reserve Banks depended on the existence of a strong tradition against continuous and large borrowing by member banks even when the rates were moderate, and on the psychological effect on the public mind of changes in official discount rates Burgess,[1] for example, holds that 'tradition is probably more important than the rate in preventing continuous borrowing'.

After 1933, however, the Federal Reserve Banks, partly as a result of the highly-liquid monetary conditions caused by almost continuous favourable balances of payments on current and capital accounts, and partly due to a deliberate cheap-money policy in keeping with many other countries, quoted the lowest rates possible. The Federal Reserve Bank of New York, for example, lowered its discount rate from 2½ to 2 per cent. in October, 1933, then to 1½ per cent in February, 1934, and finally to 1 per cent in August, 1937. The rate for all the Federal Reserve Banks was kept at 1 per cent. until 1948, when it was raised in two stages to 1½ per cent., and subsequently to 1¾ per cent. in August, 1950, and 2 per cent. in January, 1953. It was, however, lowered again to 1½ per cent. by April, 1954.

[1] Op cit., p. 221.

CHAPTER X

DISCOUNT-RATE POLICY

(Continued)

Discount-Rate Action in Countries Without Organised Money Markets. The majority of countries do not have organised money markets. There is a money market everywhere in the sense that at any given time there are always some institutions and individuals wishing to borrow money for one purpose or another and for short periods, and others seeking to lend money for those purposes and periods; but in many countries there are no market operators specialising in the mobilisation of all surplus funds available for short-term financing of their particular lines. In such cases, the banks and similar financial institutions act as the primary intermediaries between short-term lenders and borrowers and, along with the Treasury which might be borrowing direct from the public on Treasury bills, virtually constitute the money market. Such a money market, however, while it does establish approximate relations between supply and demand in respect of various types of short-term surplus funds, is seldom active and mobile and does not effectively cover all sources of loanable funds, particularly those available only for very short periods. In other words, it is not finely balanced and does not ordinarily work on a narrow margin, as a result of which it generally is not automatically responsive to changes in credit conditions and in the official discount rate.[1]

[1] In his book on *Central Banking in the British Dominions*, Plumptre prefers, in respect of all central banking operations, to think in terms of the 'capital market' rather than the 'money market' There is much to be said for this line of approach On the whole, however, it still appears better to refer more specifically to the money market when matters of discount-rate action are discussed, as such action in itself is calculated more particularly or directly to influence short-term rates and only indirectly, through the repercussions of changes in such rates, the conditions in the other sections of the capital or credit market, and to introduce the wider aspects of the capital market under open-market operations, particularly since such operations were adopted and developed as a means *inter alia* of exercising, conjointly with the discount rate or independently of it, a more direct and specific influence on sections of the capital market which could only inadequately, if at all, be reached by discount-rate action.

It has already been shown that even organised money markets are not always automatically responsive, owing to highly liquid conditions and sometimes other factors; but it can at least be said that, except under abnormal circumstances, they tend to be either automatically responsive or capable of being made responsive, with the aid of suitable open-market operations, to the discount-rate policy of the central bank. Without organised and active money markets, however, central banks cannot usually rely on the one or the other.

In spite of these handicaps, the central banks of practically all such countries have, at one time or another, adopted the discount rate as an instrument of control in varying forms and degrees. In fact, the statutes of many of the newer central banks actually contain a provision to the effect that they must fix and publish the minimum or standard rate at which they will discount eligible bills of exchange, or the rates at which they will discount the various classes of bills. Most of them quote not only a discount rate for first-class trade bills (with a currency up to 3 or 4 months and bearing two good names), which is called the official or standard or bank rate, but also the same or a slightly higher rate for agricultural bills[1] (with a currency up to 6 or 9 months and sometimes consisting of one-name promissory notes secured by warehouse receipts), or for collateral advances against bills, notes, and Government or Municipal securities. Moreover, in some cases special rates are quoted for advances against gold, or for discounts of Treasury bills. Some of them also publish separate rates for discounts and advances to the commercial banks as distinguished from the general public.

The significance of the discount rates of these central banks has been of a three-fold nature.

In the first place, in conjunction with the other rates based on it, the official discount rate indicates the rates at which the public should be able to obtain accommodation on the specified types of paper from the commercial banks as well as the central bank. Under their statutes most of these central banks have relatively wide powers of dealing with the public, but with some exceptions they have come to restrict their dealings with the public, in con-

[1] In some countries, however, lower rates are quoted by the central bank on agricultural than on commercial bills and loans, as a means of assisting and encouraging the producer In Colombia, for example, the rates of the central bank have been '4 per cent. for ordinary loan and discount operations and 3 per cent for loans secured by agricultural warrants or guaranteed by bonds of the Bonded Warehouses issued against national products of ready sale'. (*Annual Report of the Bank of the Republic of Colombia, 1936-7*)

formity with the principle that a central bank should refrain from conducting an extensive banking business with private customers, provided the commercial banks give satisfactory services and quote reasonable rates to their customers based on the rates of the central bank.

Being situated in debtor countries, where there was intermittently, if not chronically, a shortage of capital and a tendency towards relatively high interest rates, these central banks regarded it as part of their duty to ensure satisfactory banking services and reasonable rates to the community; and, with this object in view, many of them entered into direct dealings with the public to the extent considered necessary in the prevailing circumstances. In due course, however, the majority found it possible to contract their business with private customers, as the commercial banks came to render the same services and to quote the same rates as they did for the same kinds of paper, and as the latter came to make use of central bank credit in order to supplement their own resources in case of need. In practically all these countries, therefore, whether the central bank conducted a large or small business with the public, its discount and other rates tended to become the standard rates for discounts and collateral loans of the types which were clearly eligible for the central bank under its statutes and rules; and the only opportunity for substantial deviations from the central bank's rates, after allowing for differences in the currency and quality of paper and the security for advances, would thus be found in the types of accommodation which the central bank was prohibited from granting under its statutes.

Secondly, where separate rates for the commercial banks are not published, the discount rate represents the basis of the rates at which they can obtain central bank credit. In the case of some of these central banks, the commercial banks have to pay the full rates for discounts and loans as quoted by the central bank, while in other cases they are allowed a margin of ½ or 1 per cent. or more below the published rates of the central bank. This practice of allowing a margin in favour of the commercial banks has come to be adopted partly on the ground that the assumption by the borrowing bank of the risk of non-payment ordinarily gives the paper which it has presented to the central bank for rediscounts or collateral loans a higher value as compared with the paper presented directly by the public, and partly also on the ground that the central bank relies primarily on the commercial banks for the distribution of central bank credit as and when required

except in the case of the Government's requirements. In other words, the commercial banks play the rôle of intermediary between the central bank and the public, in consideration of which they have established a claim to a margin in their favour.

The foregoing applies to ordinary conditions where central bank credit is automatically brought into play as the elastic element in the credit structure. When, however, the central bank's observation of the credit situation leads it to consider that credit contraction and higher money rates are desirable, it raises its official rate as well as its other rates and may reduce or even remove the margin it formerly allowed the commercial banks, in order to emphasize more strongly to them the necessity for contraction of credit.

It is not surprising, therefore, that the idea of making the discount rate of the central bank a penal rate has not taken root in the countries under review. In the absence of organised money markets, and sometimes even in the absence of adequate and well-spread banking facilities, it follows that the rôle to be played by the rediscount rate in such countries is quite different from that of Bank rate in England. It may advantageously be below the rate charged by the commercial banks or other financial institutions for similar paper, but, as has been well said by Gregory[1] in connection with the position in the Federal Reserve System, 'if this is to be reconciled with any attempt to control credit conditions, a rise in official rates must precede the rise in market rates, and a fall in official rates must anticipate reductions in market rates'

Thirdly, the psychological value of the discount rate is of importance to the central bank as an instrument of credit control. It is at least a reflection of its opinion of the credit situation, and sometimes of the economic position generally. As Gibson[2] said, a rise in the discount rate may be regarded as 'the amber coloured light of warning of a robot system of finance and economics', while a fall in the discount rate may be looked upon as 'the green light indicating that the coast is clear and the ship of commerce may proceed on her way with caution'. Burgess,[3] in referring to the effects of Federal Reserve rate action, emphasised that 'the most powerful influence of a rate change is that which is most difficult to measure—the psychological', and that both in 1920

[1] Op. cit , p 137
[2] *London Bankers' Magazine*, April, 1937.
[3] Op cit., p 230.

and in 1929 'the psychological influence was much more important than the direct . . . because the rate change was a pronouncement by well-informed men concerning the credit situation made at a time when a change in direction of movement was ready to occur or was in process due to other causes'.

The psychological value of the discount rate depends, *inter alia*, on the prestige of the central bank and the degree of co-operation which it can obtain from the commercial banks and other credit institutions. The central bank can more readily create easy-money conditions by declaring its willingness to deal directly with the public at low rates, than it can bring about dear money simply by raising its rates and curtailing credit facilities to its own customers.[1] When a credit strain has developed and the commercial banks have approached the central bank for rediscounts and loans, the higher rates of the central bank may be automatically effective; but if they are well supplied with funds, owing to heavy exports at favourable prices or a large inflow of capital, the central bank must rely on their collaboration and its moral influence over the financial and business community.

In the light of experience, this co-operation can best be secured by means of conventional relationships between the discount rate of the central bank and the various rates quoted by the commercial banks, somewhat on the lines of the traditional conventions observed by the English banks. It has already been shown that, partly because of the powers given to these central banks to grant direct accommodation to the public on certain classes of bills and securities, the commercial banks have shown a strong tendency to quote approximately the same rates for the same types of accommodation As regards other types of accommodation, however, conventional relationships appear to be the easiest means of obtaining the desired results. This view is also held by Copland[2] who, in referring to the situation in Australia, said that 'clearly the most satisfactory arrangement is a system under which the leadership of the central bank is recognised in a set of conventions through which the banks implement the banking policy desired

[1] It must be borne in mind that, in most of the countries under review, open-market operations cannot yet be used as an instrument of control to any great extent. Moreover, the central bank cannot, in the long run, apply drastic contraction of credit to its private customers as a means of reducing the credit base and bringing about credit contraction generally, since its direct and personal contact with the borrower involves a certain amount of responsibility for meeting his legitimate requirements at all times. If the central bank fails to observe this moral obligation, it cannot expect to retain its private customers.

[2] *Economic Journal*, December, 1937

from time to time by the central bank', but that 'it will take a long time for this voluntary co-operation to reach the required standard of efficiency'; and that the Royal Monetary and Banking Commission 'seems to think that this co-operation could be hastened if the central bank had latent powers of compulsion'.

Several of the newer central banks have already succeeded in obtaining the co-operation of the commercial banks and in establishing some form of relationship between the official discount rate and the commercial banks' rates for advances and time deposits. In the case of the South African Reserve Bank, for example, the commercial banks have come to change their overdraft and deposit rates whenever the South African Reserve Bank changes its discount rate, and invariably in the same direction, although not always in the same degree When it raised its rate from 5 to 6 per cent on the 13th November, 1931, the banks raised their minimum overdraft rate from $6\frac{3}{4}$ to $7\frac{1}{2}$ per cent. on the 20th November, 1931, and when it lowered its rate from 6 to 5 per cent. on the 7th October, 1932, they lowered their rate to $6\frac{3}{4}$ per cent on the 10th October, 1932 Again, when the Reserve Bank further reduced its rate to 4 per cent on the 20th February, 1933, they reduced their rate to 6 per cent.[1] on the 20th March, 1933, but when the former reduced its rate from 4 to $3\frac{1}{2}$ per cent. on the 15th May, 1933, they did not make their further reduction of $\frac{1}{2}$ per cent till April, 1934, although they lowered their deposit rates on the 5th June, 1933. Moreover, when the Reserve Bank once more lowered its rate to 3 per cent. on the 2nd June, 1941, they reduced their overdraft rate to 5 per cent. on the 9th June, 1941. Finally, when the Reserve Bank raised its rate to $3\frac{1}{2}$ per cent. in October, 1949, and to 4 per cent. in March, 1952, the commercial banks promptly made corresponding adjustments in their rates for advances and discounts.

With regard to discounts, the commercial banks in South Africa usually adopt the local Bank rate in the discount of bills which are considered to be eligible for discount by the Reserve Bank, while for other bills they charge higher rates varying according to the currency of the bill and the quality of the name or names thereon; and in respect of loans against gilt-edged securities for periods not exceeding three months, for which the Reserve

[1] It must be added, however, that on this occasion they had partly anticipated the lowering of the Reserve Bank's discount rate by reducing their overdraft rate to $6\frac{1}{4}$ per cent on the 13th February, 1933, and by lowering their rates for 6 months' deposits in several stages from $3\frac{3}{4}$ to $1\frac{1}{2}$ per cent between 11th January and 15th February, 1933, and for 12 months' deposits from $4\frac{1}{4}$ to 3 per cent.

Bank quotes a rate ½ per cent. above its discount rate, they also adopt that rate as a general rule

In general, where under the leadership of the central bank or some other influence, conventional relationships between the discount rate of the central bank and the discount, advance and deposit rates of the commercial banks have been set up, the need for an active money market is not so great or urgent for the purpose of central banking control through the discount rate. It is, however, of great importance to the central bank operating in a country without an organised money market, to assist in the development of a money market not only as a means of improving or confirming its control, but also as a means of mobilising short-term loanable funds with a view to affording possessors of such funds an outlet for investment, on the one hand, and ensuring ordinarily more favourable terms for short-term borrowers, on the other

In South Africa, for example, some success has been achieved in these directions through the establishment, in 1949, of a National Finance Corporation with certain statutory powers and privileges, in order to develop a short-term market by providing adequate facilities for the employment of temporarily idle funds as call money. For this purpose the Corporation was empowered to invest its funds in Treasury bills or other securities of the Union Government, in securities of local authorities or public-utility undertakings in the Union, and in redeemable debentures of mining or other industrial enterprises in the Union, and its liquidity was virtually guaranteed by an obligation on the part of the central bank to discount Treasury bills for the Corporation, as and when required, at the rates at which they were acquired by the latter. The net results have been that financial institutions generally have come to operate on a finer margin, which has made the money market more sensitive and thus more responsive to the operations and policies of the central bank; that the central bank more specifically performs the function of lender of last resort, being called upon to grant accommodation to the Government and the commercial banks only after all other sources have been exhausted through the medium of the National Finance Corporation; and that, through its participation along with all other principal financial institutions in the ownership and the management of the Corporation, the central bank has been afforded an excellent opportunity of direct and regular contact with such institutions.

Decline in Significance of Discount Rate. It was stated in the previous Chapter that, after World War I, the importance of the discount rate as an instrument of credit control tended to decline absolutely as well as relatively to other methods of control; and that, after the world-wide suspension of the gold standard, and particularly after the outbreak of World War II, discount-rate policy as such was completely relegated to the background by other factors. This decline in the significance of the discount rate is to be attributed, firstly, to radical changes in technical money-market conditions and in the economic structure; secondly, to the increased use of other methods of credit control because of their greater directness and adaptability in certain circumstances; and thirdly, to the maintenance of cheap money as a matter of public policy or to the existence of liquid monetary conditions on account of other factors

In the first place, banking methods and the stock-in-trade of money markets, as well as the relative position of money markets, had undergone an important change. With the increasing tendency towards commercial credits on open account and bank advances on current account, the bill of exchange came to be used less and less as an instrument for financing domestic trade and the short-term requirements of industry and agriculture; and owing to the contraction of international trade as a result of tariff restrictions, exchange control and other factors, as well as the increased financing of foreign trade by means of bank advances and settlements with sight drafts or telegraphic transfers, the foreign bill also came to be employed on a much smaller scale. Banks thus arranged directly for the financing of a larger proportion of foreign trade than was formerly the case. The existence in many countries, due to amalgamations over the past thirty years, of a small number of big banks with nation-wide branch systems, and liquid monetary conditions (whatever the cause) further reduced the volume of domestic and foreign bills offered for discount in the central money markets.

Another change of importance in money-market conditions was the predominance of Treasury Bills or other short-term Government securities as the stock-in-trade of discount markets and as the secondary reserve of banks. Owing to the tremendous increase in national debts and in current financial requirements of the State since 1914, Governments everywhere made a considerably increased use of Treasury bills and other short-term instruments. In Great Britain, for example, Treasury bills out-

standing usually amounted to about £20,000,000 before 1914, whereas in 1924 the average amount was £600,000,000, in 1934 £850,000,000, in 1939 £1,070,000,000, in 1942 £2,670,000,000 and in 1944 £3,500,000,000[1]; and in the United States the total amount of Treasury bills outstanding increased from $156,000,000 in June, 1930, shortly after they were first introduced, to $1,404,000,000 in June, 1934, $2,002,000,000 in December, 1941, and $16,060,000,000 in October 1944, while the certificates of indebtedness (the old form of short-term financing) rose from $1,640,000,000 in June, 1929, to $3,096,000,000 in June, 1942, and $29,546,000,000 in October, 1944. Apart from these, the discount markets came to deal more and more in other short-term as well as medium-term Government securities.[2] These developments naturally brought about a radical change in the structure of the discount market and increased the Treasury's influence over the market as compared with that of the central bank; and it rendered close co-operation between the Treasury and the central bank more necessary than ever before.

Furthermore, the relative position between London and other money markets has changed considerably since World War I. As Einzig[3] said, 'while before the War London's lead as a market for short-term loans was incontestable, since the War several rival centres have developed and have been making rapid progress at the expense of London'. New York has developed an international money market of great importance, including an active discount market. Paris, Amsterdam and Zurich have also succeeded in organising discount markets, although restricted in their scope and turnover by various factors; and Stockholm, Brussels, Rome and Tokio have likewise been developing their money-market organisation. The London market, which formerly exercised a predominant and centralised influence over monetary conditions in the world, has thus had to contend with the increasing competition of other money markets; and as a result of this decentralisation there was at times serious confusion and overlapping in international financial affairs.

5 Moreover, political, monetary and economic complications in various countries, and frequently also exchange control, dislocated

[1] In addition, Treasury deposit receipts were issued to the banks, the amount outstanding at the end of 1944 being £1,395,000,000

[2] It has been said that to some extent the London discount market has already become an extension of the gilt-edged market in the Stock Exchange (*Economist*, 15th April, 1944)

[3] *Investors' Chronicle* (London), 23rd May, 1931.

the international flow of capital and caused the so-called 'hot money' to flee back and forth in search of refuge and safety. This was accompanied by increased rigidity in the structure and functioning of the capital market in most countries.

The field for discount-rate policy was further narrowed as a result of increased rigidity in other parts of the economic structure. It was previously stated that the efficient working of a discount-rate policy required, *inter alia*, a substantial measure of elasticity in the economic structure in order that prices, wages, production and trade might respond to changes in money rates and credit conditions. Wagemann[1] also stressed the point that the discount-rate policy 'presupposes an economic system in which the price, wage and interest levels—at least in greater part—are readily movable, and in which entrepreneurs work on a narrow margin and consequently react very sensitively to the slightest changes in costs and the profits basis'

Since the war of 1914-18 the trend has, for various reasons previously given, been definitely in the direction of economic rigidity, and in this respect the principal differences between many countries in recent times have been only in the degrees of controlled or closed economy practised by them. With the world-wide suspension of the gold standard, managed currency was adopted by most countries, and in some cases planned economy was added to it In this connection, Wagemann[2] rightly pointed out that 'the more an economy is regulated in prices, wages, transportation charges, and the more the Government extends its influence over business, the more the influence of interest declines'; and that 'the influence of interest also declines as the tax burden increases', or, generally, according as the ratio of fixed costs to total costs increases

The development of other methods of credit control (such as open-market operations, direct action, moral suasion and changes in the minimum cash reserves of commercial banks), which were regarded as more direct in their incidence or more adaptable in their application in certain circumstances, naturally caused a further contraction of the use of the discount rate. These methods will be discussed in the following chapters.

The final factor in the decline of discount-rate policy was the existence, since about 1933, of liquid monetary conditions in almost every country and under practically all kinds of circum-

[1] *Wirtschaftspolitische Strategie*, p. 75.
[2] Ibid, pp. 313-5

stances. The causes hereof can be briefly recapitulated as follows: firstly, the increase in the volume of money resulting from the revaluation of gold reserves in almost all countries more or less in accordance with the depreciation of their currencies relative to the former gold parities, or from the higher prices (in terms of such depreciated currencies) paid for newly-mined gold; secondly, in the case of countries like the United States, Switzerland, Portugal, India, Australia, Venezeula and the Union of South Africa, net favourable balances of payments over the period under review taken as a whole; and thirdly, the direct or indirect creation of bank credit for Government and other purposes as a matter of public policy before the war and as one of the means of financing the war and post-war reconversion and reconstruction. In recent years, however, there has, as explained previously, been a revival of discount-rate policy in various countries, although for the reasons just mentioned it is not likely to regain its former major rôle in monetary policy.

General Observations. While it is obvious that, under present-day conditions of economic rigidity and complexity as well as monetary liquidity, there is much less scope for an effective discount-rate policy than was formerly the case, the discount rate of the central bank has nevertheless a useful function to perform in certain circumstances and in conjunction with other measures of control. In short, changes in discount and interest rates can be employed as a necessary instrument contributing towards the restoration of equilibrium, since they operate in various ways to correct wrong trends, namely, through their influence on the supply of and demand for money and credit, or on the rate of investment and speculation, or on human psychology in general.

Keynes had, in his *Treatise on Money*,[1] drawn attention forcibly to the fact that the traditional theories of Bank rate had concentrated largely on the influence of Bank rate 'as a means of regulating the quantity of bank-money' and 'as a means of protecting a country's gold-reserves by regulating the rate of foreign lending', and had not clearly or adequately taken into account the influence of Bank rate on 'the rate of investment relatively to saving' and the repercussions of changes in the relation between saving and investment on prices, production, employment and wages. He considered that Hawtrey had approached the idea of Bank rate as affecting the rate of investment, but had placed the whole emphasis 'on one particular kind of investment, namely, invest-

[1] Vol. 1, pp 185-220.

ment by dealers and middlemen in liquid goods—to which a degree of sensitiveness to changes in Bank-rate is attributed which certainly does not exist in fact'.

Whereas others before him had tended to underrate the importance of the influence of Bank rate on the rate of investment in fixed capital, Keynes in turn was inclined at the time to overemphasise its direct influence relative to that of the rate of investment in liquid goods; the rate of speculation in commodities, securities and real estate; the quantity of money; and the psychological reactions of individuals and groups. As a generalisation, it can be stated that all these factors tend to be influenced by changes in money rates sooner or later and in varying degrees, depending upon the prevailing circumstances, and that they are in any case closely connected, acting and reacting on one another.

In his subsequent writings, Keynes further emphasised the importance of equilibrium between saving and investment as a condition of general economic equilibrium, but came to the conclusion that changes in interest rates were no longer capable of contributing materially towards the maintenance of such equilibrium. He considered that, apart from regulation of the quantity of money through open-market operations, the objective of equilibrium between saving and investment should be pursued through the medium of State organisation of investment[1] or, failing this, compensatory planning of public works,[2] rather than through that of Bank-rate policy. The prevalence of managed currency and the maintenance of cheap money as a matter of public policy caused many to agree with Keynes that the discount rate could now be regarded as an out-of-date instrument of control.

On the other hand, Robbins[3] adhered to the view that the discount rate 'is an indispensable instrument, an instrument which we must at all times be prepared to use with speed and vigour if the circumstances appear to call for such action', since 'cheap money conditions which are prolonged beyond the period when investment is naturally stagnant, are likely to breed bad investments', and since 'increased investment demand from whatever

[1] 'I expect to see the State, which is in a position to calculate the marginal efficiency of capital-goods on long views and on the basis of the general social advantage, taking an ever greater responsibility for directly organising investment; since it seems likely that the fluctuations in the market estimation of the marginal efficiency of different types of capital, calculated on the principles I have described above, will be too great to be offset by any practicable changes in the rate of interest' *General Theory of Employment, Interest and Money*, p 164

[2] See his articles in London *Times*, January, 1937.

[3] *Lloyds Bank Monthly Review*, May, 1937

quarter must be met out of increased saving', failing which 'rates must rise'. Hawtrey[1] considers that Keynes and the majority of other economists have 'rejected the instrument of regulation evolved by practical experience' because of their wrongly 'assuming that credit regulation must work mainly or even exclusively through long-term investment'; and he points out that many economists underestimate the part played by short-term borrowing from banks for the buying and holding of commodities and for purposes of working capital generally, and consequently, that they fail to take into due consideration 'the ultimate reactions of the short-term rate of interest on the dealers in commodities'. Wagemann[2] also believes that, although 'the discount rate can influence production . . . through its influence on long-term interest', it can do so 'more quickly through the short-term credits which play an important part in the financing of production'.

The former emphasis on control of short-term rates is attributed by Williams[3] to the fact that, in those days, 'short-term assets played the predominant rôle in banking changes and it was through them that adjustments were made to changes in the reserve position of the banks', the result of which was 'a high degree of sensitivity in short-term open market rates'. In recent times, however, 'as bank investments have increased, long-term interest rates have shown increased sensitivity to changes in bank reserves, and the emphasis in monetary theory has shifted to the need for controlling the long-term rates, as more effective for the control of investment, income, and employment than control merely of the short-term rates'.

In short, reliance can no longer be placed merely on direct control of short-term rates and on such influence as changes in these rates may have on long-term rates and the volume of investment. Other methods of control are also required which have direct reactions on long-term rates and investment, and which are directly related to the general level of money incomes rather than to the quantity of money. For these reasons, open-market transactions in long-term securities as well as fiscal policy and investment control have come into prominence. Increased attention has also been paid to exchange control as a means of contributing towards the correction of a fundamental disequilibrium,

[1] *Capital and Employment*, pp. 2-4.
[2] Op cit, pp. 316-7.
[3] 'The Implications of Fiscal Policy for Monetary Policy and the Banking System' (reprint from *Proceedings of the American Economic Association*, December, 1941), pp 2-4

and to the adjustment of forward-exchange rates relatively to spot rates with a view, for example, to attracting foreign funds or discouraging the outflow of funds while maintaining comparatively low money rates for domestic purposes. All these methods will be discussed in some detail in the following chapters.

With regard to the general relationship between short- and long-term rates, it can at least be said that they tend to influence one another in due course. At times they have been found to rise and fall together, being apparently affected by the same cause. In general, however, there is a time lag, the short-term rates being usually more sensitive and responsive than the long-term rates and thus more likely to change first. Their tendency to have automatic reciprocal reactions on one another arises from the fact that, as Hawtrey[1] says, 'long-term and short-term loans sometimes present themselves as alternatives both to borrowers and to lenders', and that 'the two rates are in competition with one another at various points'. From the point of view of discount-rate policy, the direct and indirect relationships between short- and long-term rates are important, as in the absence of exceptional circumstances the central bank can, by changing its discount and interest rates, exert some influence directly on short-term rates

As regards the extent to which bank credit can be employed to play the part of capital in order to reduce long-term rates, it must be borne in mind that, in the long run, the function of capital can be performed only by savings of one kind or another and the supply of capital relative to demand must, therefore, be allowed to exert its influence in due course on the level of interest rates. In short, interest on capital cannot, in the long run, be treated as a monetary phenomenon determined by the supply of media of exchange, although it could be influenced temporarily by changes in such supply in order to offset disturbing factors.

Within limits both as to time and degree, cheap money may be artificially maintained with the aid of central bank credit and with beneficial results to business activity as well as to State finance. As part of a policy designed to promote recovery and reflation, it may be made to serve a valuable purpose in times of deflation and depression; but a cheap-money policy has its limitations, either because at one time it may fail to encourage enterprise owing to distrust, fear and uncertainty regarding the future course of prices, costs and exchange rates, or because at another time, when it does serve to promote enterprise, it may lead to abuse of credit, un-

[1] *A Century of Bank Rate*, pp. 146 and 206.

sound investment, over-speculation, depreciation of currency, etc.

The artificial cheapening of money frequently tends to discourage enterprise and to strengthen the desire for liquidity[1] on the part of entrepreneurs, investors and speculators. In due course, however, it would tend to have inflationist effects and might then bring about a new disequilibrium which could not be corrected without higher interest rates and contraction of credit. At times it might, of course, be possible to bring about the contraction of credit by means of open-market operations alone, but the higher rates might still be found necessary to reinforce such credit contraction and to reverse the trend of expansion when it had gone too far or to slow it down when it showed signs of acquiring undue momentum. In short, cheap money tends to set in motion forces which can sometimes be controlled only by dear money.

In conclusion, although it must again be admitted that present-day conditions and Governmental policies do not afford much scope for independent discount-rate action, there is good reason to believe that the official discount rate has nevertheless a useful function to perform in conjunction with other measures of control; and this is borne out by the recent revival of discount-rate policy which will be further discussed in Chapter XVI. In the light of past experience, it deserves to be emphasised that discount-rate action should be applied in good time if it is to be effective, since the trends of business and speculative movements cannot easily be reversed after they have acquired a certain momentum. In order to be able to judge when is the proper time to take action, various factors have to be kept under constant observation. The central bank can no longer rely on its gold-reserve ratio or on the actual outflow or inflow of gold as its principal guide to credit policy. Under existing conditions there is no automatic device or mechanical formula which can be used as a successful basis for discount-rate policy. The central bank must maintain continuous observation of all the factors bearing on the business situation and speculative activity, and exercise its personal discretion in the light of past experience and with the aid of historical and statistical studies

[1] Williams, for example, says that 'the question raised by our experience (i e in the United States) . is whether too much emphasis has not been placed upon the interest rate as a cost of investment and too little upon it as an inducement to invest', and that the considerable decline in the velocity of money in the United States during the 'thirties may, apart from the lack of confidence, 'have been due also to the fact that the interest return from investment was not high enough to overcome "liquidity preference"' (Op cit, pp 10 and 11)

CHAPTER XI

OPEN-MARKET OPERATIONS

Evolution of Open-Market Operations. Prior to 1914 the Bank of England had, as stated previously, relied upon Bank rate as the primary instrument of credit control. At various times, however, when, owing to large foreign balances, or for other reasons, the London money market was in a highly liquid state, the Bank experienced great difficulty in making its rate effective and felt the need for some method which would enable it to reduce the liquidity of the market whenever it desired to raise money rates generally

The method which was evolved in earlier days was that of withdrawing funds from the market principally by means of what were known as 'selling Consols spot and buying for the account'[1] and 'borrowing in the market'. By the former was meant that the Bank sold consols for cash and simultaneously repurchased them for the 'account', i e. the date for the monthly settlement on the Stock Exchange; and thus, to the extent that Consols were sold spot and repurchased, funds were withdrawn from the market for the unexpired period of the monthly Stock Exchange account. Borrowing in the market, on the other hand, meant that the Bank borrowed from discount houses and bill-brokers against the pledge of Government securities Whichever method was adopted, the net result was the same, namely, that the total volume of funds in the market was reduced and that the market rate tended to rise much or little depending upon the extent of the Bank's operations.

According to Sayers,[2] the Bank used the method of selling Consols spot and buying them back for time more extensively than that of borrowing in the market up to the end of the nineteenth century, but after that the position was reversed. While these two methods were the principal devices employed by the Bank for the purpose of withdrawing funds from the market, other methods

[1] According to King, this method was first adopted during the 'thirties of the nineteenth century It was also frequently referred to as 'borrowing on Consols'. (*History of the London Discount Market*, p. 116)

[2] *Bank of England Operations, 1890-1914*, pp. 27-36.

were also used on various occasions, such as the outright sale of Government securities, borrowing from the commercial banks, and borrowing from special depositors (Governments of Japan, India and Argentina).

After discussing the employment of all these methods during the period from 1890 to 1914, Sayers[1] came to the conclusion that 'the Bank had, in an extremely hesitating and not very consistent manner, solved its problem of controlling market rate by adopting a number of devices for reducing the supply of money in the market', but that 'the solution of this problem was piecemeal rather than systematic, and in many ways it was unsatisfactory', and that 'the diversity of methods employed by the Bank alone suggests that it was not very happy about any of them.'

The only other central bank which undertook some form of open-market operations prior to 1914 was the Reichsbank, which, in addition to buying and selling foreign bills, used to offer Treasury bills for sale in the open market at times with a view to absorbing surplus cash and preventing a too rapid fall in the market rate.[2]

When the Federal Reserve System was enacted in 1913, it was also intended that the Federal Reserve Banks should use open-market operations as a supplement to discount-rate policy; and they were accordingly authorised to buy and sell, in the open market,[3] bonds and notes of the United States Government, and also bills, notes, revenue bonds and warrants with an unexpired currency of not more than six months, issued in anticipation of the collection of taxes or of the receipt of assured revenues by any State, county, district, political sub-division, or municipality in the United States.

During the war of 1914-18 and for some time thereafter, the open-market operations of the Bank of England, the Reichsbank and the Federal Reserve System were, as in the case of their discount-rate policy, governed mainly by the requirements of war finance or post-war readjustment; i.e. apart from the creation of central bank credit through collateral loans against Government securities, they increased their own holdings of Government

[1] Ibid., pp. 128-9.

[2] Conant *History of Modern Banks of Issue* (Fifth Edition), p 217

[3] In March, 1942, the Federal Reserve System was also authorised to buy or sell Government securities (and certain Government-guaranteed securities having a maturity not exceeding 6 months) directly from or to the United States Government, provided that the aggregate amount of such securities acquired directly from the Government which were held at any one time by the twelve Federal Reserve Banks did not exceed $5,000,000,000

stocks or Treasury bills [1]

From 1920 the Bank of England and the Federal Reserve Banks again began to follow their own open-market policy. At first it was once more employed merely as a subsidiary and complementary instrument with the object of making Bank rate effective. In due course, however, the Bank of England came to adopt open-market operations at times as the principal method of credit control, and sometimes independently of changes in Bank rate; and the Federal Reserve Banks followed suit after a time. In fact, since 1932 there has been a marked tendency, on the part not only of the Bank of England and the Federal Reserve Banks but also of the other central banks which began to participate in open-market operations, to employ this method as an independent instrument.

The main reasons for the increased use and importance of open-market operations may be sought in, firstly, the experience gained during the 1914-18 war and post-war periods; secondly, the decline of the discount rate as an instrument of credit control owing to the changes and complications discussed in the previous chapter, and the consequent need for another and more direct method; thirdly, the wider scope for open-market operations as a result of the considerably increased volume and variety of Government and other gilt-edged securities which are now available and negotiated in the markets of most countries; and fourthly, the increased needs of the State in peace as well as in war and its increased influence over the money market and the capital market generally.

Meaning of Open-Market Operations. In the wider sense, open-market operations may be held to cover the purchase or sale by the central bank in the market of any kind of paper in which it deals, whether Government securities or other securities, or bankers' acceptances or foreign exchange generally.

In Great Britain, United States and a few other countries, however, the term 'open-market operations' has come to be applied only to the purchase or sale of Government securities, both long-term and short-term, and also only to the outright purchase or sale thereof. The principal reasons for this narrower interpretation appear to be that the markets for Government bonds and Treasury bills in these countries are sufficiently broad and active for all the purposes of open-market policy; that the

[1] In France and other belligerent countries the central bank usually assisted the State in the form of special advances rather than purchases of Government securities

central bank rather than the market takes the initiative in outright purchases or sales of Government securities; and that such operations, therefore, reflect the deliberate credit policy of the central bank (whether such policy is followed by the central bank in subservience to the requirements and objectives of the State or solely in accordance with its own aims and objectives). On the other hand, in the case of purchases of Government securities under 'sales contracts' or 'repurchase agreements', or of bankers' acceptances, the initiative is taken by the market. The readiness of the Federal Reserve Banks, for example, to buy such securities and acceptances at all times under certain conditions as to currency and rate has been based on their desire to develop and maintain an active money market. It is true that within certain limits the Federal Reserve Banks could increase or decrease their purchases of bankers' acceptances by adjusting their buying rates accordingly, but in practice they do not ordinarily use their buying rates for such purposes. They generally follow the market rates and keep their buying rates close to the former, primarily for the purpose of ensuring the continued existence of an active discount market.

In countries, however, where the central bank also deals outright in Government-guaranteed securities and municipal or other securities, because of an inadequate supply of Government securities or for other reasons, such transactions should appropriately be included under 'open-market operations', since their effects on the monetary and credit situation are the same as in the case of operations in Government securities. This also applies to purchases or sales of foreign exchange by the central bank, but as other aspects of monetary policy are involved in such transactions, they are discussed elsewhere, namely, Chapters V and XIV.

Theory of Open-Market Operations. Briefly stated, the theory of open-market operations, as a special form of creation or cancellation of central bank credit, is that purchases or sales of securities by the central bank tend directly and immediately to increase or decrease the quantity of money in circulation and the cash reserves of the commercial banks; that an increase or decrease in the supply of bank cash and, therefore, in the credit-creating capacity of the commercial banks, tends still further to increase or decrease the quantity of money; and that changes in the quantity of money tend to bring about relative changes in money rates and credit conditions, which in turn tend to bring about the

desired adjustments in the domestic levels of prices, costs, production and trade

Open-market operations thus constitute another method of aiming at the desired expansion or contraction of money and credit and of general economic activity. But while discount-rate action depends only on its indirect influence on money and credit through primary changes in short-term money rates and secondary repercussions on long-term interest rates or yields, open-market operations are designed to have a direct and immediate effect on the volume of money and credit as well as on money and interest rates generally. In regard to the latter aspect, open-market policy does not depend, as discount-rate policy does, only on the indirect effects of changes in short-term money rates on long-term interest rates or yields, but also aims at exercising a direct influence on the latter by means of operations in long-term securities. Open-market operations represent, therefore, a more direct as well as a more comprehensive instrument of credit control, provided that there are broad and active markets in the types of short- and long-term securities in which the central bank can legitimately deal, and that such securities constitute a sufficiently sensitive and decisive part of the whole capital or credit structure.

Another important feature of open-market operations is that the buying of securities by the central bank makes the monetary position liquid in a different manner from what rediscount does. In some countries, the commercial banks have traditionally shown a tendency towards greater caution whenever they are indebted to the central bank, even though the latter openly desires expansion of credit at the time and, for this reason, does not raise its discount and interest rates. Thus, there is more chance of the central bank's policy of expansion being implemented under open-market operations than under rediscount.

With regard to the technique of open-market operations, the initial impact of such operations is on the deposits of the commercial banks with the central bank as well as on the customers' deposits with the commercial banks. By selling securities, for example, the central bank reduces, other things being equal,[1] the bankers' deposits by an equivalent amount, as the buyers of these securities will usually[2] be either commercial banks or customers of

[1] Other things are not always equal, however, as will be shown later

[2] Exceptions arise when customers of the central bank other than the commercial banks buy some of these securities and pay for them out of their deposits with the central bank This would reduce the other deposits of the central bank and make the reduction in bankers' deposits less than what it would otherwise have been

commercial banks, and as payments for such purchases will be effected through debits to the bankers' accounts with the central bank; and by selling securities the central bank also reduces, other things being equal, the amount of customers' deposits with the commercial banks to the extent that such customers acquire the securities sold by the central bank. Conversely, when the central bank buys securities, the result will be reflected in credits to the bankers' accounts and, therefore, in an increase in the commercial banks' cash reserves (which virtually constitute the credit base of the community), and also in an increase in the customers' deposits with the commercial banks (which represent the principal constituent of money in circulation).

According to the theory of open-market operations, therefore, such operations could be directed towards the stabilisation of prices and/or business activity, or at least towards preventing substantial deviations from the desired level of prices or business activity. For its successful application, however, the theory requires, firstly, that the quantity of money in circulation as well as the cash reserves of the commercial banks will be increased or decreased at least approximately in accordance with the extent or aim of the central bank's open-market operations; secondly, that commercial banks will seek to increase or decrease their loans and investments more or less in accordance with the increase or decrease in their cash reserves; and thirdly, that the scope or demand for bank credit will increase or decrease more or less in accordance with the increase or decrease in the credit base and the lowering or raising of money rates. While it is a fact that normally there are at least strong tendencies in the direction of such relationships, important qualifications have to be made in respect of frequent deviations from the normal.

In the first place, the quantity of money in circulation and the cash reserves of the commercial banks do not always increase or decrease even approximately in proportion to the purchase or sale of securities by the central bank, as one or more powerful disturbing factors may be operating simultaneously For example, the outflow of capital or a net unfavourable balance of payments for any other reason, or the withdrawal of notes for increased currency requirements or for hoarding purposes, may neutralise partly or wholly the effect on the supply of bank cash of a purchase of securities by the central bank or may accentuate the effect of a sale of securities; and a net favourable balance of payments or the return of notes from circulation or from hoards may offset

partly or wholly a sale of securities by the central bank or may accentuate the effect of a purchase of securities. At times, of course, the central bank may buy or sell securities, as the Bank of England and the Federal Reserve Banks have frequently done, merely for the purpose of offsetting an outflow or inflow of gold and foreign exchange or the movements of Government funds or seasonal movements generally; but the central bank does not always succeed in accurately gauging the extent of all the possible disturbing factors, and at times they may be beyond the control or the neutralising capacity of the central bank.

Secondly, commercial banks do not always increase or decrease their loans, discounts and investments in accordance with the increase or decrease in their cash reserves. Changes in the credit base and, therefore, in the volume of credit that could be created do not always bring about corresponding or proportionate changes in the volume of credit that is actually created. There are many circumstances of a monetary, economic or political nature which may deter a commercial bank from employing increased cash reserves fully if at all, or from contracting credit when its reserves are reduced.

It is true that in England a traditional convention operates, under which the commercial banks now maintain a cash ratio[1] of between 8 and 9 per cent. of their deposit liabilities, increasing their loans and investments within the relative limits when their cash reserves increase, and vice versa. England, however, is the only country so far where such a convention has been more or less rigidly adhered to, and this has been rendered possible by various traditions as well as by the breadth, activity and liquidity of the London money market. In France, Holland, Norway and Canada, the banks' cash ratio is also, for special reasons, not subject as a rule to large fluctuations, but there is not the same degree of stability and rigidity over long and short periods as in the case of the English banks.

In the United States, on the other hand, another tradition has been established, namely, that when the cash reserves of member banks increase, they tend first to reduce or repay their indebtedness to the Federal Reserve Banks; and when a bank has discharged its debts in full, it may seek to employ any further increase in its

[1] Prior to the end of 1946, the month-end cash ratio of the London clearing banks had, with the aid of some window-dressing, been maintained at or near 10 per cent of their deposit liabilities As from that date, however, they agreed in consultation with the Bank of England to keep the *daily* cash ratio as nearly as practicable at 8 per cent

reserves or it may not, depending upon Government policies and activities, the international political outlook, the prospects of business, the trend of prices and exchange rates, etc. At times the member banks have carried huge excess reserves with their Reserve Banks, amounting to $3,100,000,000 in August, 1936, and to as much as $6,646,000,000 in December, 1940. At the end of 1941, the ratio of member banks' cash reserves (including cash in vault) to their deposit liabilities stood at 27 per cent, compared with 9.4 per cent. in 1926 and 9.3 per cent. in 1929. The same position has arisen in several of the newer countries. In the Union of South Africa, for example, the ratio of the cash reserves of the commercial banks has varied from 11.6 per cent. in the middle of 1931 to 55 per cent. at the end of 1944; while in Argentina the ratio was 12 per cent. at the end of 1929 and 21 per cent. at the end of 1936, in Sweden 2.4 and 10.3 per cent respectively, and in Switzerland 2.7 and 10.9 per cent. respectively.

With regard to the relation between an increase in the credit base and the creation of commercial bank credit, there are certain technical factors which must be taken into consideration by all banks The one is that, while under some conditions and with a traditional cash ratio of, say, 10 per cent., £1 of cash reserve may serve as a basis for £10 of domestic credit, under other conditions such as an exceptional demand for foreign exchange and a drain of gold £1 of cash reserve can command only £1 of gold or foreign exchange; and, consequently, banks have to consider the domestic and the international situation and the repercussions of credit expansion on their country's balance of payments. Similarly, if the expansion of credit creates conditions which lead to larger withdrawals of note or metallic currency for circulation or hoarding purposes, £1 of cash reserve can provide only £1 of currency. The other factor is that, unless the banking system as a whole adopts a policy of credit expansion, the expanding banks would tend to lose part of their cash reserves to the non-expanding banks and might thus be compelled to contract again. The net result is that, unless the conditions are generally favourable for credit expansion and unless there is an unsatisfied demand for bank credit, an increase in the credit base is limited in its ultimate effects on bank credit.

Thirdly, it is frequently not just a case of commercial banks refraining from the full employment of their increased cash reserves, but also one of a lack of willing or deserving borrowers. While an increase in the credit base does tend to lower money

rates, the scope or demand for credit does not always increase in accordance with the reduction in money rates In times of economic or political uncertainty, entrepreneurs may not be prepared to undertake great risks[1] even if their bankers offer them increased accommodation at moderate rates. Sometimes it is not only a case of unwillingness to borrow on the part of entrepreneurs, but also of unwillingness to lend on the part of banks and lenders generally Thus, owing to the risks involved, there may be either a lack of borrowers as such or a lack of borrowers who are credit-worthy applicants and require credit for purposes which are acceptable to banks under the prevailing circumstances. Conversely, when money rates rise owing to a decrease in the credit base, the increase will not always result in a reduced demand for bank accommodation or in reduced opportunities for the employment of bank credit; or if such a reduction does take place it will not always be in accordance with the rise in money rates. The prospects of business and speculation may appear sufficiently attractive for entrepreneurs, investors and speculators to induce them to make still greater use of credit notwithstanding the higher rates

The circulation of money and credit does not have a constant velocity, nor is the velocity always directly controllable as it is the resultant of human factors Ordinarily it tends to increase during periods of rising business activity, sometimes in spite of a substantial hardening of money rates, and it tends to decrease during periods of declining business activity, sometimes in spite of a substantial easing of money rates; but the rate of increase or decrease cannot always be accurately predetermined and effectively counteracted It has happened, for example, that a considerable lowering of money rates, owing largely to the elements of uncertainty, distrust and pessimism which may be associated with it, has contributed towards a further reduction in the velocity of circulation.

In general, however, the least that can be said is that there prevails, other things being equal, a strong tendency in the direction of all the various relationships referred to above The complications arise, of course, from the fact that frequently other

[1] As Leonard Ayres said, 'that willingness to take risks (i e present risks in the hope of making future gains) can be legislated out of being, but it cannot be legislated into being', and 'it can be induced, and encouraged, and facilitated, but it cannot be ordered or coerced into existence', for the reason that 'it must be the product of conditions and circumstances that are both favorable to business enterprise, and reliably stabilised' (*American Bankers' Association Journal*, May, 1938)

things are not equal because of the operation of disturbing factors. The personal element is, in conjunction with the increasing rigidity of the economic structure, responsible for most of the difficulties and complications which tend at times to lessen the efficacy of open-market operations as an instrument of credit control.

Scope of Open-Market Operations. The question as to how far the open-market operations of a central bank can be adjusted for the purpose of counteracting the effects of disturbing factors has attracted a good deal of attention in recent times. Hawtrey,[1] for example, admits emphatically, in connection with an increase in the credit base resulting from open-market operations, that 'an addition to the outstanding quantity of money, the "unspent margin", in itself accomplishes nothing', since 'the supply of money, in the only sense in which markets feel it, is the flow of money spent in exchange for commodities', and since 'the release of cash by traders is an indispensable condition of an increase in the consumers' income' and 'an absorption of cash is inseparable from an equivalent reduction of the consumers' income' He also admits that 'the release or absorption of cash is not rigidly dependent upon the increase or decrease of lending' by the banks, and that 'there may be other causes affecting the amount of balances that people are willing to hold'; but he maintains that 'these other causes must be taken into account by the authorities regulating credit', and that 'they must endeavour so to adjust their measures that the resultant enlargement or compression of the consumers' income and outlay will be just what is required'.

There is little doubt that, as matters stand to-day, central banks should regard it as part of their duty to 'endeavour so to adjust their measures', although it must be borne in mind that, in the light of past experience, non-monetary factors are sometimes outside the radius of action of central banks, and that, in attempting to do the impossible at such times, they may set in motion other forces which may do more harm than good. It is, however, incumbent upon central banks to determine within what limits, and under what circumstances, they are able to neutralise the effects of non-monetary factors by means of a suitable adjustment of the supply of credit through open-market operations and any other method which can be successfully applied or adapted to such purpose. What is very important in connection with any such attempts at credit adjustment is, as Hawtrey[2] has said, that the

[1] *Art of Central Banking*, pp. 145-8.
[2] Ibid , pp 168-9.

central bank should beware of the danger not only of taking action too late or depending upon an index (such as the gold-reserve ratio) which reacts too slowly to disequilibrium, but also of taking action half-heartedly instead of decisively.

While Hawtrey believes that central banks can neutralise the effects of non-monetary forces or overcome the 'instability of credit' and the 'instability of velocity', he does not pin his faith on open-market operations alone On the contrary, he considers that the use of the discount rate in conjunction therewith is essential Keynes and several other economists, on the other hand, have maintained that open-market operations, undertaken extensively and skilfully, could achieve the purpose without a discount-rate policy if they were supplemented by State organisation of investment or, failing this, by compensatory planning of public works.

For the effective carrying out of a comprehensive open-market policy, however, it is essential not only that there should be broad and active markets in short-term and long-term Government securities, if not also other securities, but also that the obviously gilt-edged securities in respect of which open-market operations are conducted should represent the central and sensitive part of the financial structure as a whole So far London and New York are the only centres with markets which satisfactorily comply with this requirement; and this is evidently the main reason why the most extensive use of open-market operations has so far been made by the Bank of England and the Federal Reserve Banks. In the matter of short-term securities the question of possible loss is not usually a deterrent, but unless the market in long-term securities is wide and active, the central bank may be hampered by the loss which it may incur as between the prices at which it bought the securities and those at which it has to sell; and for this reason many central banks use short-term securities as far as possible.

A further limitation in connection with open-market operations is the fact that, before a central bank has succeeded in acquiring an adequate volume of Government or other securities in order to be able to withdraw funds from the market when it desires to contract credit, it has created an equivalent amount of central bank credit in the course of purchasing those securities. In other words, when it sells securities it is merely cancelling credit which it had itself created previously. In the interest of a sound monetary situation, therefore, the central bank is limited to acquiring

securities on a large scale only during a period of credit stringency or under conditions of unsatisfied demand for credit generally. The least that could be achieved by the creation of central bank credit under such conditions would be to avoid banks and money-market operators having to rediscount with the central bank or to enable them to repay their previous indebtedness to the central bank; and if it is considered appropriate at the time to encourage them to seek ways and means of expanding credit, the open-market operations could be carried to the point of providing them with the necessary cash reserves. If, however, the central bank persists in buying large amounts of securities during a period of monetary ease, its action would be tantamount to creating an unwanted plethora of money and embarrassingly low money rates. On the other hand, where a country is intermittently short of capital for legitimate development or has external debts which it is in a position to repatriate and which include securities convertible into local securities and suitable for open-market operations, the central bank has opportunities for acquiring the requisite volume and variety of securities[1] without first sowing the seeds of the boom which it will subsequently have to nip in the bud

Till about thirty years ago, central banks had not had much experience in matters relating to credit adjustment for neutralising purposes, and consequently such matters were regarded as falling principally within the realm of theory. The extensive experience, however, which the central banks of such countries as Great Britain and the United States have now had with such credit adjustment, has brought it within the practical sphere, but has also revealed its limitations and the difficulties encountered in highly abnormal circumstances. The limits within which and the circumstances under which credit can be effectively adjusted for specific purposes, cannot in all cases be reduced to a rigid formula and must be left to the discretion of central banks and their economic advisers under the guidance of past experience and current observation In any particular country, the extent of its possible application at any particular time will depend upon such factors as the prevailing economic, political and social conditions; the temperament of the people; the make-up of the banking structure; the experience, skill and prestige of the central bank; the state of public finance; the degree of co-operation between the

[1] Where the Government is more or less permanently indebted to the central bank, the latter could, of course, try to arrange for such loans being converted into marketable securities

central bank, on the one hand, and the commercial banks and the Government, on the other; the extent and activity of the security markets in which the central bank can operate; and the degree of interconnection or mutual relationship between such markets and other sections of the capital or credit structure.

Open-Market Operations in Great Britain. As previously stated, open-market operations have frequently been adopted in recent times as the principal method of credit control in Great Britain, and also as an independent instrument.

The various objectives of open-market operations by the Bank of England since 1918 may be summarised as follows:

(1) to make Bank rate effective or to prepare the ground for a change in Bank rate;

(2) to avoid disturbances in the money market as a result of movements of Government funds or seasonal movements generally;

(3) to offset the inflow and outflow of gold;

(4) to support Government credit in connection with the issue of new loans or the conversion of existing loans; and

(5) to create and maintain conditions of cheap money as an aid to business recovery or war finance.

As in earlier days, the Bank of England continued to use open-market operations as a supplement to Bank-rate policy at times when it desired to bring the market rate closer to Bank rate or to adjust market conditions to a change which it was about to make in Bank rate. For example, in the last week of January, 1931, after sterling had been weak in terms of various currencies for months in succession and the Bank's gold reserve had dropped to almost £140,000,000, and after market rates had been below the Bank rate of 3 per cent by at least 1 per cent for many months, the Bank suddenly intervened in the market with a policy designed to bring market rates more into touch with the existing Bank rate. It not only sold securities with a view to withdrawing loanable funds from the market, but it also sold Treasury bills in the market at rates considerably in advance of market rates for fine commercial bills. These operations resulted in the immediate adjustment of market rates to the higher level dictated by the Bank's intervention. The rise in money rates proved effective so far as the foreign exchanges were concerned, and the rates on New York and Paris moved away from their respective gold-export points.[1] After 1932, however, open-market operations were for various reasons

[1] *Economist*, 31st January, 1931.

not adopted for the purpose of making Bank rate effective. As will be explained later, the use of Bank rate as a positive instrument of credit control in Great Britain was not resumed until November, 1951.

With regard to the neutralising of seasonal movements, a more systematic and consistent technique was evolved as compared with the hesitating and half-hearted manner in which such operations were undertaken prior to 1914. The Bank, for example, almost regularly acquired Government securities (stocks or Treasury bills, mostly the latter) during December in order to offset the heavy withdrawals of currency for the Christmas holiday and shopping disbursements, and disposed of them in January with the return of notes from circulation. It also conducted such 'stabilising' operations in connection with the movement of Government funds, acquiring securities during periods of heavy tax payments or at other times when funds flow into the Government accounts[1] at the Bank and disposing of them when heavy disbursements are made by the Government for dividends or for other purposes. The object of these purchases and sales[2] was, of course, to prevent, as far as possible, the market and its rates being disturbed by temporary withdrawals and accruals of funds on account of the financial operations of the Government. Moreover, the Bank adopted a similar practice in respect of the 'ironing out' of the seasonal autumnal drain, which was such a feature before 1914. On some occasions, however, it refrained from neutralising a particular seasonal movement apparently because of its desire to see a corresponding change in market rates.

The policy of neutralising disturbing movements was also applied to offsetting the inflow and outflow of gold resulting from what appeared to be temporary or artificial trends in the balance of payments, particularly in connection with the large-scale movements of fugitive capital. Prior to 1932, the Bank did this on its own account as part of its policy of insulating the internal

[1] Even before World War II, Government accounts derived added importance from the operations of the Exchange Equalisation Account, the Unemployment Insurance Fund and other extra-budgetary funds, but under war and post-war conditions the movements of all types of Government funds naturally assumed much larger proportions and called for neutralising operations on a considerably increased scale

[2] These transactions do not necessarily represent actual purchases or sales in the market, but frequently consist, on the one hand, of Treasury bills being acquired by the Bank directly from the Treasury by tender or otherwise, and, on the other hand, of Treasury bills maturing which are not renewed by the Bank. This is generally acknowledged as one of the great advantages of Treasury bills in connection with central banking operations, of which open-market operations in the literal sense constitute only one phase

credit structure from external forces as far as possible and avoiding changes in market rates and in Bank rate which were not essential for purposes of control and regulation. It bought securities when gold flowed out of the country and sold them when gold flowed in again. When, however, in its opinion the prevailing conditions demanded that the outflow or inflow of gold should have its peculiar effect on the credit base either wholly or partly, it did not offset the particular movement of gold or did so only partly according to circumstances. After the Exchange Equalisation Account was brought into being in 1932, the Bank performed these operations mainly on behalf of the Account, which is managed by the Bank for account and subject to the control of the Treasury, which in turn works in close co-operation with the Bank.

Through the Exchange Equalisation account, the effects of gold and capital movements on the credit situation were offset, as a general rule, by the sale of an equivalent amount of Treasury bills when gold or exchange was purchased by the Account, and by the purchase or redemption of bills in the case of an outflow of gold or a sale of exchange. On 31st March, 1938, the Account held 42,546,000 fine ounces of gold, but as a result of the substantial outflow of gold after that date, mainly to New York and Paris, the gold holding of the Account declined to 21,684,000 ounces by 30th September, 1938, and would have dropped further to about 3,000,000 ounces by 31st March, 1939, if the 47,000,000 ounces which had previously been sold by the Account to the Bank of England[1] had not been transferred back to the Account in January, 1939.

In connection with capital movements, a new open-market technique was adopted in May, 1938, when a substantial repatriation of French funds from London took place. Instead of seeking to offset the temporary contraction of bank cash by buying Treasury bills, the Bank allowed it to be known in the market that any dealer or broker finding himself short of funds, and unable to balance his position by borrowing in the market, would be able to sell bills at ½ per cent. to the Bank's broker instead of having to get direct accommodation from the Bank at its official discount or advance rates, and it was reported that these terms

[1] Between 1934 and 1937 the Bank had bought gold from the Exchange Equalisation Account from time to time, mainly in connection with the big rise in the note circulation, but partly also as a means of maintaining the credit base at a level demanded by the cheap-money policy and relieving the Account at the same time.

were availed of to an appreciable extent. As the *Economist*[1] pointed out at the time, 'the shifting of the initiative for open-market operations from the authorities to the market itself secured obvious advantages, for the size of those operations was automatically adjusted, with the greatest possible precision, to the amount of help required by the market.'

Another phase of open-market policy has been that of supporting Government credit in connection with the issue of new loans or the conversion of old loans. During World War I and World War II, the Bank had in various ways to assist the Government in raising the enormous amounts required; and between these wars the Bank was on several occasions also called upon to support Government credit[2] for one purpose or another. The principal occasion was in respect of the conversion of the £2,000,000,000 5 per cent War loan on a 3½ per cent. basis in July, 1932 Without the active assistance and co-operation of the Bank in the form of a substantial increase in the credit base and the lowering of money rates generally, the Treasury could not have carried out such a gigantic and essential conversion operation at such a low rate successfully.

As an indication of the extent and trend of the Bank's open-market operations over a period of years, it may be pointed out that, from £311,761,000 at the end of 1929, the Bank's total holdings of Government securities increased to £368,600,000 at the end of 1932. During this period the Bank's gold reserve fell from £150,549,000 to £124,309,000, while the Bank's note circulation and deposits together rose from £495,241,000 to £516,228,000, showing that the purchases of securities were aimed at neutralising the outflow of gold as well as increasing the credit base. Between the end of 1932 and that of 1937, however, the Bank's holdings of Government securities declined from £368,600,000 to £334,300,000 respectively, whereas its gold holdings (valued at about 85s per fine ounce) increased from £124,309,000 to £327,244,000 and its notes and deposits from £516,228,000 to £673,909,000. This indicates that the Bank found it possible to reduce its holdings of securities[3] during the years

[1] 28th May, 1938

[2] Wagemann points out that, if open-market policy is used to support Government securities 'when, in times of strained bank credits, drops in quotations have occurred ... Government loans can become first-class liquid investments in so far as they are not already so', and that 'by means of this, the savers as well as banks and savings-banks will perhaps invest in Government securities to a greater extent than they did before' *Wirthschaftspolitische Strategie*, p 318.

[3] In this connection, it must be added that £60,000,000 of Government securities

1933-37 while still pursuing its policy of maintaining or increasing the credit base, since its large purchases of gold, primarily from the Exchange Equalisation Account, were more than sufficient to provide not only for the increase of £134,000,000 in its note circulation, but also for a further increase of £23,000,000 in its deposits

Between the end of 1937 and 6th September, 1939 (three days after the declaration of war), the Bank's holdings of Government securities were increased by £366,000,000 which enabled the Bank not only to transfer the whole of its gold holding of £327,000,000 to the Exchange Equalisation Account (£200,000,000 in January, 1939, and the remainder in September, 1939), but also to provide for a further increase of £44,500,000 in the note circulation without reducing its deposits by more than £1,100,000.

The increase in the credit base as well as in the quantity of money in circulation, which was rendered possible by the Bank's open-market operations during the 1932-39 period, was undertaken *inter alia* as part of a monetary policy designed to aid business recovery in the sense of creating favourable monetary conditions for production and trade, so as at least to prevent projects and transactions being cancelled or held up because of dear money or unwillingness on the part of banks to supply the requisite credit facilities. This phase of the Bank's open-market policy, however, never attained such large dimensions and great prominence as in the case of the operations of the Federal Reserve System [1]

With regard to operations since the outbreak of the war, the Bank's holdings of Government securities (including ways and means advances) were, between 6th September, 1939, and the end of 1944, increased still further by £850,000,000, which enabled the Bank to provide for the tremendous increase of £690,000,000 in its note circulation under war conditions (viz. from £550,000,000 to £1,240,000,000) and, in addition, for an increase of £150,000,000 in bankers' deposits (i.e the credit base). This large acquisition of Government securities by the Bank thus constituted a necessary part of the direct and indirect means of financing the war. Between 1944 and 1952 there was a further increase of about £300,000,000

were transferred from the Issue Department of the Bank to the Exchange Equalisation Account in December, 1936, in connection with the reduction of £60,000,000 in the fiduciary note issue, which in turn was connected with the transfer of £65,000,000 of gold from the Exchange Equalisation Account to the Bank

[1] One of the reasons for the smaller dimensions of open-market operations in Great Britain is the existence of the traditional convention, previously referred to, under which the commercial banks maintain an approximately constant cash ratio and react promptly, therefore, to changes in the credit base resulting from open-market operations.

in the Bank's holdings of Government securities, which was reflected in an increase of about £250,000,000 in its note circulation.

In this connection it must again be borne in mind that changes in the Bank's holdings of Government securities do not always represent the results only of open-market operations, but are frequently connected with changes resulting from other operations of the Bank, such as those in respect of ways and means advances to the Government, Treasury bills acquired directly from the Government or from other central banks, Treasury bills maturing without being renewed, transfer of securities to other central banks and extra-budgetary funds, transactions with the Exchange Equalisation Account, etc. It may be said, however, that the Bank's open-market operations and its other transactions are dovetailed and constitute variable complements in its overall credit policy, and that the extent of the open-market operations depends upon the effects of the other transactions which in turn depend upon a variety of circumstances.

The war, for example, brought about important changes in open-market technique. In the first place, the traditional barrier between the Bank and the commercial banks was broken down and open-market relations were established between them and regularly used whenever occasion demanded The *Economist*,[1] however, pointed out that the new technique of open-market operations did not supplant the old, but that 'whether the official agent (i.e. of the Bank) transacts any particular body of open-market operations with the banks or the discount houses is now a question, not of routine or tradition, but of convenience and circumstances', and that 'the business will be transacted where bills of the required amount and currency are to be found, or can be sold most readily'. Secondly, open-market operations, which had already before the war served to reduce the need of the discount market at certain times to rediscount with the Bank at its penal rates, were finally substituted for 'all penal recourse of the market to the facilities of the central bank'. According to the *Economist*, the market had, since the beginning of the war, been excused all recourse to penal borrowing from the Bank at the official rates, and had found it possible to obtain its facilities on open-market terms on all occasions when, on pre-war precedents, it would have been forced 'in the Bank'.[2] This situation continued

[1] 1st August, 1942.
[2] Ibid

until November, 1951, when, as explained by the Chancellor of the Exchequer in Parliament, it was decided to restore flexibility to the short-term market by abandoning the previous arrangements 'under which in practice the Bank Rate was quite ineffective and the Bank of England supplied the needs of the money market at fixed and very low rates', and by allowing the rates for Treasury bills 'to fluctuate according to supply and demand subject to day-to-day operations by the authorities'.

In general, it may be said that the Bank, acting in close co-operation with the Treasury and the National Debt Commissioners[1] and operating as the agent of the Exchange Equalisation Account and numerous central banks, had even before the war acquired a position of great power and control over the money, exchange, gold and capital markets of Great Britain. It must, however, be emphasised that the Bank's increased control over these markets, as compared with the period prior to 1914, rested largely on the Government's increased power and influence which were derived from such factors as the preponderance of the Treasury bill in the discount market, the considerably increased volume of extra-budgetary funds managed by Government Departments and invested in Government securities, the suspension of the gold standard, the operations of the Exchange Equalisation Account, etc. These developments tended to place the Bank in a position of greater subservience to the requirements of State finance, and rendered close and continuous co-operation between the Bank and the Government more necessary than ever before. Under the Defence (Finance) Regulations and under war conditions generally, the Bank acquired still greater power and control over the financial markets, but it was also *ipso facto* placed in a position of still greater subservience to Government requirements and Treasury policy

Open-Market Operations in the United States. The open-market policy of the Federal Reserve System has, on the whole, aimed at the same objectives as in the case of the Bank of England, but with important differences in degree or emphasis and in the scale of operations.

Open-market operations were on various occasions undertaken for the purpose of making the discount rates of the Federal Reserve Banks effective or preparing the ground for changes in

[1] The National Debt Commissioners manage the investments of the Unemployment Insurance Fund, National Health Insurance Fund, Post Office Savings Bank, Trustee Savings Banks, &c , the combined resources of which have given the Commissioners an appreciable influence over the market for gilt-edged securities

their rates. This was apparently their primary function during the 'twenties.

Such operations were also frequently carried out with the object of supporting Government credit in connection with new issues or conversions, or maintaining orderly conditions in the market for Government securities. In the latter connection, for example, attention was directed by the Board of Governors, in their annual report for 1939, to the direct influence of open-market operations on conditions in the capital market. Referring to the decline in the prices of United States Government and high-grade corporate bonds on the outbreak of war, the report stated that, 'in undertaking large-scale open-market operations in September, 1939, the System was guided principally by the following considerations: (1) By helping to maintain orderly conditions in the market for United States Government securities the System can exert a steadying influence on the entire capital market, which is an essential part of the country's economic machinery, and disorganisation in which would be a serious obstacle to the progress of economic recovery . . . (2) The system also has a measure of responsibility for safeguarding the large United States Government portfolio of the member banks from unnecessarily wide and violent fluctuations in price. In varying degrees, depending upon the prevailing circumstances, both these factors continued to influence the open-market operations of the Federal Reserve System during the war as well as after the war.

Moreover, it has become a regular part of open-market policy, as in Great Britain, to avoid disturbances in money-market conditions as a result of movements of Government funds or seasonal movements In September, 1937, for example, the Federal Open Market Committee[1] issued a statement that 'in view of the expected seasonal demands on the banks for currency and credit during the coming weeks the Committee authorised its Executive Committee to purchase in the open market from time to time sufficient amounts of short-term United States Government obligations to provide funds to meet seasonal withdrawals of currency from the banks and other seasonal requirements', and that 'reduction of the additional holdings in the open market

[1] Consisting of the Board of Governors of the Federal Reserve System and five representatives of the Federal Reserve Banks, and formed like its predecessors (the Federal Open Market Investment Committee and the Federal Open Market Policy Conference) to co-ordinate the open-market operations of the twelve Federal Reserve Banks

portfolio is contemplated when the seasonal influences are reversed or other circumstances make their retention unnecessary'.

With regard to gold movements, purchases or sales of securities were made at times to offset the effects of an outflow or inflow of gold, but these transactions did not represent a regular phase of open-market policy and were usually undertaken only in the case of exceptional movements of gold.

In the United States, a somewhat similar procedure as in the case of the British Exchange Equalisation Account was adopted in December, 1936, for the purpose of insulating the internal credit structure from gold movements, through the medium of the Stabilisation and Inactive Gold Accounts operated by the Federal Treasury, which bought all the imported or locally-produced gold with the proceeds of Treasury bills and sterilised it for all practical purposes In September, 1937, however, $300,000,000 gold was transferred from the Inactive Gold Account to the Federal Reserve System in the shape of an equivalent amount of gold certificates which were issued to the Federal Reserve Banks, while the latter credited the Treasury accounts with the proceeds thereof; in February, 1938, it was announced that gold acquired by the Treasury would be included in the Inactive Gold Account only to the extent that such acquisitions in any one quarter exceeded $100,000,000; and in April, 1938, it was decided, for reasons of monetary policy associated with the trade recession, to abolish the Inactive Gold Account and desterilise all the gold still held by that Account.

The principal phase of open-market policy in the United States has, either in conjunction with discount-rate policy or independently thereof, been the attempt to counteract extreme trends in the business situation by buying securities during periods of declining activity and selling securities during periods of expanding activity As far back as 1923, the following principle was adopted by the Federal Reserve Board, namely, 'that the time, manner, character, and volume of open-market investments purchased by Federal Reserve Banks, be governed with primary regard to the accommodation of commerce and business and to the effect of such purchases or sales on the general credit situation'[1].

Burgess[2] emphasised in 1936 that 'open market operations found their major use as one of the most effective instruments

[1] *Federal Reserve Bulletin*, May, 1923.

[2] *Reserve Banks and the Money Market.* Revised Edition (Harper), pp 249-254

of the Reserve System in its effort towards creating monetary conditions which would favour economic stability', and that 'Federal Reserve policy had been a compensating influence directed towards greater business stability', but that 'the effectiveness of operations clearly depended on general economic conditions'. With the aid of a chart which showed the general timing of open-market operations since 1922 in their relation to the volume of industrial production in the United States, he proved that 'purchases of securities had been made at times of business recession, declining prices, heavy member bank debt, and declining or stagnant credit volume', and had usually been accompanied and followed by a reduction in member bank debt, reduction in interest rates, increased volume of credit, steady or rising commodity prices, and at times by business recovery'; while 'sales of securities had been made at periods of active business, rising prices, and expanding credit and had been followed by increases in member bank borrowing, higher interest rates, a check in credit expansion, and often a moderation in business expansion'.

Burgess also showed that 'from 1922 through 1927 the response of the economic organism to relatively small changes in Federal Reserve policy was extraordinary', whereas 'in 1928 amd 1929 and later in the depression even the most vigorous measures taken by the Reserve System had relatively little effect'.

With regard to the failure of the Federal Reserve System in dealing with the great speculative boom of 1928-29, the general consensus of opinion both in and outside the United States appears to have been that the main causes of the failure were the following. In the first place, the easy-money policy of 1927 (as reflected in purchases of securities and a reduction in official discount rates), which aimed not only at reversing the business recession that had set in locally after the first quarter of that year but also at contributing towards an improvement in the European monetary and economic situation, was maintained too long on account of the wider objective and thus contributed towards the engendering of the conditions that ultimately led to speculative excesses.

Secondly, while the System did sell securities to the amount of \$405,000,000 between the beginning of 1928 and April, 1929, and raised, for example, the discount rate of the Federal Reserve Bank of New York from $3\frac{1}{2}$ to 5 per cent. during 1928, this restrictive policy was pursued half-heartedly and hesitatingly instead of promptly and drastically. It is generally considered that, as soon

as it was discovered that the speculative situation was tending to get out of hand, the New York discount rate should have been raised by two decisive strokes of at least 1 per cent. each, instead of by three successive increases of ½ per cent. each followed by a gap of thirteen months before the final increase of 1 per cent.

Thirdly, the System attempted to restrict credit for speculative uses and make money dear for those purposes while maintaining an open door and lower rates for business activities. It relied to a large extent on direct action and moral suasion, both of which failed under the peculiar conditions prevailing in the United States at the time.

With a view to counteracting the deflation and depression which set in after the 'Wall Street Crash', the Federal Reserve Banks increased their holdings of Government securities from $523,000,000 to $848,000,000 between the end of 1929 and that of 1931; but as this did not have much effect, they decided in 1932, like the Bank of England, to follow in more determined manner a policy of cheap money and reflation with the aid of open-market operations. During the years 1932-33 they increased their holdings of Government securities to $2,439,000,000, and still further to $2,564,000,000 by 1938. As late as September, 1937, the Board of Governors[1] still referred to the purpose of the open-market operations as being 'to maintain at member banks an aggregate volume of excess reserves adequate for the continuation of the System's policy of monetary ease for the furtherance of economic recovery', and to 'the System's policy of maintaining a condition of monetary ease' as 'a policy that has been actively pursued since the early months of 1932'.

During the years 1939-40, however, their holdings of Government securities were reduced to $2,184,000,000 as one of the means of counteracting the large increase in the member banks' cash reserves consequent upon the inflow of capital and gold. With the entry of the United States into the war at the end of 1941, the open-market policy was again reversed, and by the end of 1942 the Federal Reserve Banks held almost $6,000,000,000 in Government securities, which were still further increased to $11,600,000,000 at the end of 1943 and $24,000,000,000 at the end of 1945. The objective of these operations was, of course, as in the case of the Bank of England and various other central banks, to facilitate the financing of the war effort and the maintenance of cheap money.

[1] *Federal Reserve Bulletin*, October, 1937

After the war there was at first a declining tendency in the System's total holdings of Government securities until a level of $18,300,000,000 was reached in June, 1950. But whereas its holding of Treasury Bills, certificates and notes was reduced from $23,300,000,000 at the end of 1945 to about $12,700,000,000 in June, 1950, due mainly to the substantial net budget surplus during this period, its bond portfolio increased from $947,000,000 to $5,600,000,000 respectively. This increase is to be attributed to the fact that the System considered itself obliged, as an essential part of the Government's monetary and debt-management policies, to continue to support long-term Government bonds at relatively low yields, and thus to take up any excessive offerings of such bonds in the market by banks, insurance companies or other financial institutions.

After the outbreak of the Korean war in the middle of 1950, however, there was again a large increase in the System's total holdings of Government securities, namely, to $24,700,000,000 at the end of 1952 The increase of $6,400,000,000 was the net result of an increase of $7,500,000,000 in the System's holdings of bills, certificates and notes and a decrease of $1,100,000,000 in its bond portfolio. These operations were accompanied by an increase in the yield of long-term Government bonds from 2.34 per cent in the middle of 1950 to 2.79 per cent. at the end of 1952, and in the Treasury bill rate from 1 17 to 2.22 per cent. respectively.

Further reference to the System's open-market policy since the end of the Second World War will be made in Chapter XVI.

The relative success which had attended the open-market policy of the Federal Reserve System during the period 1922-27 induced some to use it as a basis for a theory of business-cycle control which could, in their opinion, be similarly applied at all times and in all places. Its subsequent failure, however, demonstrated, as previously stated in a general manner, that it can be successfully applied only within certain limits and under certain circumstances. It should be noted, moreover, that during the period of successful application the discount rate was always used in conjunction with open-market operations.

In this connection it must be said that, in the opinion of several American writers during the thirties, open-market operations had only been successful in their capacity as a supplement or complement to discount-rate policy and should only be used as

such. Willis,[1] for example, wrote in 1936: 'The older use of the open market transaction—that of actually influencing the rate which central banks have determined upon as a desirable one for the community—is, thus far, the only demonstratedly desirable employment of the open market operation', and 'such operations may prove a useful alternative or auxiliary to other modes of applying the central bank's credit', but 'they do not constitute an independent kind of influence or type of transaction'. Clark[2] said that 'although the New York Reserve Bank, by its open market operations, had been particularly successful in preventing short-time disturbances in the money market, smoothing out extremes in interest rates, and in meeting emergencies, the Bank's operations had been scarcely, if at all, successful in the field of credit control', and that 'from the standpoint of credit control, open market operations were complementary to discount policy'. Spahr[3] also held that open-market operations 'are a helpful instrument to use to meet seasonal demands in business, to offset the effects of government and corporate financing and gold movements, but it is very doubtful if they can have any appreciable effect upon cyclical or secular trends in business'. Harris[4] considered that 'open market operations had proved to be a weapon of second rate effectiveness', and that 'the high hopes held out for them were to be explained by a failure to understand their significance and functioning'.

With regard to the relationship between open-market operations and the volume of Federal Reserve credit outstanding, emphasis must be laid on the traditional tendency of the member banks, when their cash reserves were increased as a result of the System's purchases of securities, first to reduce or repay their indebtedness to their Federal Reserve Banks. This meant that such purchases of securities frequently did not result in a net increase in the volume of Federal Reserve credit, although whenever pursued in sufficiently large volume they did naturally bring about such an increase in due course. Conversely, the System's sales of securities did not always result in a decrease in the volume of Federal Reserve credit, as member banks frequently borrowed from their Federal Reserve Banks to offset the depletion of their reserves. While member banks showed a tendency to offset the System's open-market operations in these ways, the general ex-

[1] *Theory and Practice of Central Banking* (Harper), p 199.
[2] *Central Banking under the Federal Reserve System* (Macmillan), p 246.
[3] *Federal Reserve System and the Control of Credit* (Macmillan), p 130
[4] *Twenty Years of Federal Reserve Policy*, Vol I, p 11

perience was that, except under highly abnormal conditions, open-market operations were accompanied by a psychological reaction on the part of member banks which was favourable to credit expansion when rediscounts declined, and favourable to credit contraction when rediscounts increased.

CHAPTER XII

OPEN-MARKET OPERATIONS
(Continued)

Open-Market Operations in Other Countries. It is only in recent times that the question of open-market operations by central banks has attained some measure of prominence in countries outside of Great Britain and the United States.

As stated previously, the Reichsbank had also, prior to 1914, undertaken open-market operations at times with a view to absorbing surplus cash and preventing a too rapid fall in the market rate. With its reorganisation in 1924, however, the Reichsbank was prohibited from conducting open-market operations, except in trade bills and foreign exchange; and it was not till 1933 that it was again specifically given the power to do so. Sarow,[1] for example, bewailed the circumstance that 'the Reichsbank found it a severe handicap that in the credit crisis of 1931 open-market operations were still forbidden'.[2]

Under the amendments of 1933, the Reichsbank obtained the right to buy and sell certain specified securities,[3] 'with a view to regulating the money market', and to include such securities as cover for the Bank's note issue; and, in the annual report of the Reichsbank for that year, it was stated that those amendments were intended to give the Bank 'an increased freedom of movement with regard to the requirements of modern times, *inter alia* by means of the open-market policy'. Such open-market operations were promptly undertaken for the purpose of exercising general control over the money and capital markets, and supporting the credit of the State in connection with conversions and new

[1] *Offenmarktpolitik zur Konjunkturregelung*, Preface

[2] Mildred Northrop, after referring to the Reichsbank's 'readiness to abandon bank rate in periods of emergency' (prior to 1933) as proof that 'the Reichsbank itself considered its discount policy an inefficient tool of central bank control', said that 'this attitude was conditioned . in part by the inability of the German bank rate to lean upon open market operations' *Control Policies of the Reichsbank, 1924-33*, p 306

[3] Securities issued by the Reich or by any German State or municipality or by certain Government credit institutions, or bonds guaranteed by the Reich or by any German State, or shares of German railways

loans for carrying out the policy of National Socialism.

Sarow,[1] for example, considered that 'in Germany the large conversions and the financing of the labour creation programmes would have been impossible without direct and indirect open-market policy', and pointed out that, while 'the *direct* open-market operations of security purchases attained only a high point of about 450 million marks', 'the employment thereof for the purpose of fostering the capital market and as an initial stimulus for conversions produced a powerful effect'.

After the initial stimulus had been administered by open-market operations, the Reichsbank proceeded to place its credit at the disposal of the German economy in the form of rediscounts to the commercial banks and other credit or financial institutions, including the rediscounts of the special bills (Sonderwechsel) which were issued by the Government to its contractors, rather than in the form of direct open-market operations. By the end of 1938 the Reichsbank's holdings of trade and special or other bills (including some Treasury bills) had increased to 8,244,000,000 Rm. Then, with the outbreak of war, the Reichsbank was again called upon, as in the war of 1914-18, to contribute directly and indirectly on a large scale towards the financing of Government expenditure; and by the end of 1944 its holdings of bills (this time mainly Treasury bills) amounted to no less than 41,340,000,000 Rm.

With regard to France, Margaret Myers[2] said that in the decade following 1857, 'when the Bank of France changed its discount rate frequently in imitation of the Bank of England, the question was raised as to whether or not the Bank of France should also engage in open-market operations in the English fashion', and that 'the question was decided in the negative, not because it was thought that the Bank lacked the necessary authority, but because it would expose the Bank to risk of loss, and also to the suspicion of manipulating the market'. After 1918, however, the attitude of the Bank of France generally was that it did not have any real authority to conduct open-market operations, as it was not specifically empowered by its statutes to buy and sell Government securities for its own account.

Under the Convention of 1928 between the Treasury and the Bank, the latter agreed to take non-interest bearing notes[3] of the

[1] Op. cit , Preface and p 88.

[2] *Paris as a Financial Centre*, p 29.

[3] These notes were to take the place of the Treasury notes which the Bank held at the time and which represented advances made during the War against Russian Government bonds as collateral.

Caisse d'Amortissement, with a maturity of three months but renewable without limit, to the amount of 5,930,000,000 francs, and the Bank was authorised to sell these notes in the market 'if it judges this to be useful, in order to affect the volume of credit and maintain the control of its circulation' and to 're-purchase the notes sold before maturity'. According to Margaret Myers,[1] 'when in December, 1929, and January, 1930, the inflationary tendency of the Paris market raised the question of possible action by the Bank of France in the open market, it was discovered that the cost would be prohibitive, for the Bank would be obliged to pay interest on such of the notes as were in the hands of the public, although in the hands of the Bank they were non-interest bearing'.

In June, 1938, the position of the Bank of France as outlined above was altered in that it was specifically empowered by decree of the President to undertake open-market operations[2] in respect of Treasury bills, National Defence Bonds with a maturity not exceeding two years, short-term bills of local authorities, and bankers' acceptances. The decree emphasised that this power was granted to the Bank 'in order to influence the volume of credit and to regulate the money market'; and the Prime Minister, in his report to the President, justified it on the ground that 'capital movements which have affected the Paris market, in the course of recent years, have demonstrated the utility of giving the Bank greater freedom and a more effective power of intervention', and that open-market operations 'should render discount policy more effective on the money markets'. According to the annual report of the Bank of France for 1939, its interventions in the money market during that year 'effectively aided the lowering of money rates which had already become evident at the end of 1938, and . . . made it possible to avoid abrupt reactions which, in a market left to itself, might have been precipitated on several occasions by the vicissitudes of international politics'.

It is not quite clear to what extent and in what manner the Bank of France used its open-market powers during World War II,

[1] Ibid., p. 30

[2] The Bank was prohibited from obtaining securities direct from the Treasury and was only allowed to operate in the open market This was facilitated by the establishment of five discount houses, some of whom perform functions similar to those of the discount houses operating in the London market On the other hand, unless such State institutions as the Caisse Autonome d'Amortissement, the Caisse des Depôts et Consignations and the Rentes Stabilisation Fund, whose operations might have important effects on security values and money-market conditions, co-operated closely with the Bank of France, the latter's control over the Paris money market could be seriously impaired.

but between the end of 1938 and that of 1944 its holdings of Treasury and other bills acquired in the open market, increased from 2,000,000,000 to 12,000,000,000 francs respectively. By the end of 1952 this amount had risen to 275,000,000,000 francs.

In Holland, the subject of open-market policy was discussed in 1936 when the renewal of the charter of the Netherlands Bank had to be sanctioned by the Legislature. Under the old charter, it was unable to conduct open-market operations[1] and had to rely almost entirely on the discount rate for purposes of credit adjustment, but under the new charter as amended by the Act of 1945 it was given the power to buy and sell Government bonds of the Netherlands and its overseas territories, Treasury bills and bankers' acceptances. It was also provided that one-half of the income derived by the Bank from open-market operations and from transactions in foreign exchange should be allocated to a special reserve fund, until the latter amounted to one-half of the authorised capital.

In Norway, where under the old law there was some doubt as to whether the Bank of Norway had the power to carry out open-market operations, an amendment was passed in 1936 with a view to making the position quite clear It was specified that the Bank could buy and sell Government bonds or bonds of the Norwegian Mortgage Bank or other interest-bearing and readily negotiable securities. Provision was also made for a Securities Adjustment Fund, and for allocation to this Fund of a portion of the Bank's profits after payment of a 6 per cent. dividend. Moreover, any profit or loss resulting from purchases and sales of securities was to be credited or debited to this Fund. The Governor[2] of the Bank expressed the opinion that open-market operations constitute 'a necessary supplement to the means of the Bank in the carrying out of its credit policy', and that 'the intervention may act in conjunction with other means and intensify their effect'.

In Sweden, owing to highly liquid money-market conditions and the relatively small amount of Government securities held by the Riksbank in 1938, the latter made arrangements with the National Debt Office under which Treasury bills or other Government securities could be created,[3] as and when required, to be

[1] The Netherlands Bank had for many years followed the practice of carrying foreign bills in its portfolio, but this was adopted primarily as a first line of defence for exchange rates

[2] *Monthly Report of Bank of Norway*, February 1936

[3] As these securities were to be specially created for the purposes of the Bank, it would have to pay the interest on such securities itself (According to the Annual Report of the Svenska Handelsbanken for 1942, the Riksbank requisitioned

sold in the open market for the express purpose of absorbing an excess of liquid funds.[1]

In Belgium, the National Bank was expressly authorised in 1937 to buy and sell Treasury bills and long-term Government bonds in addition to trade bills, but the limits which were imposed on the Bank's purchases of Government securities hampered the carrying out of any extensive open-market policy. In October, 1939, however, the maximum limit for holdings of Government securities was raised from 1,500,000,000 to 5,000,000,000 francs. The Treasury, moreover, assisted in the establishment of an open market by issuing three-months' Treasury bills on a public tender basis.

In 1938 the National Bank of Hungary was also empowered to make purchases and sales on the open market calculated to direct and regulate the money market and the capital market, and to undertake participation in an institution for the regulation of these markets.

In Denmark, on the other hand, the National Bank had already prior to 1936 conducted open-market operations in mortgage-bond certificates[2] as a means of regulating the volume of money available for building activity in accordance with movements in the country's balance of payments.

Open-Market Operations by New Central Banks. The need for some form of open-market operations as a supplement to discount-rate policy and as an instrument of neutralisation was, under modern conditions, similarly felt by many of the new central banks which were established after 1920. The scope for open-market policy on the part of these banks was, however, limited by the existence not only of relatively narrow markets for Government securities, but, in many cases, also of statutory restrictions on their powers of dealing in Government securities.

These restrictions were imposed, as explained in Chapter III, as a result of the unfortunate experiences which central banks had with Government paper during the 1914-18 war and post-war periods, and were intended to protect the central banks against unsound demands from the State. In this connection, however, it must be pointed out that many of these restrictions were relaxed

500,000,000 kr. in Treasury bills from the National Debt Office for such market operations.)

[1] For the same purpose the Riksbank was authorised to pay interest on time as well as demand deposits.

[2] In 1940 the Central Reserve Bank of Salvador was also empowered to buy or sell certificates of the Mortgage Bank of Salvador.

during the period from 1930 to 1933 under the pressure of the severe depression, and also since that time as a result of the increased needs of Governments or as a matter of public policy.

The South African Reserve Bank, for example, which was at first permitted to invest in Government securities, having more than six months but not more than two years to run, only up to the amount of its paid-up capital and reserve funds, was authorised in 1930 to invest such an amount in Union Government securities having a maturity exceeding two years, and was further empowered in 1941 to hold Union Government securities of any currency to a total amount equal to its paid-up capital and reserve funds plus one-third of its liabilities to the public. While this additional power was granted to the Bank at the time in order to facilitate the repatriation of Government securities domiciled overseas, it was retained in the new law of 1944 notwithstanding the fact that in the meantime practically the whole of the £75,000,000 repatriated securities acquired by the Bank had been redeemed by the Government out of the proceeds of new local loans; and, furthermore, this limitation on its total investments in Union Government securities was the only restriction imposed by the new law on its dealings in securities

The Bank of Canada was at first limited to holding 'securities issued or guaranteed by the Dominion of Canada or any province, having a maturity exceeding two years from the date of acquisition by the Bank', only up to three times the amount of its paid-up capital; but by 1938 it was empowered to hold such securities up to 50 per cent of its outstanding note and deposit liabilities, provided that its holdings of securities not maturing within ten years did not exceed five times the amount of its paid-up capital and reserve funds. These remaining restrictions were, however, removed entirely during 1954. With regard to the Central Bank of Ireland, the only restriction imposed on its investments in securities of Eire and in securities of public authorities in Eire, is that such securities shall have been offered for public subscription or tender before being bought by the Bank.

Apart from such restrictions on their holdings of long-term Government securities as still remained, the newer central banks have found their scope for operations in these securities further narrowed, as in the case of some of the older ones, by the lack of broad and active markets in such securities.[1] As the Governor

[1] Plumptre says that the difficulty with open-market operations in countries like New Zealand South Africa and Australia is due to 'two apparently independent

of the Bank of Norway has said, 'we should not close our eyes to certain defects of our securities market, which to a rather large extent limit the possibility of conducting operations of this kind', and 'we may at times make purchases, but it is difficult to put through sales of securities in larger proportions, because the market is so limited, and a driving down of the prices may produce harmful subsidiary consequences'[1]. The Commonwealth Bank of Australia is also reported to have said, in connection with open-market operations in Australia, that 'these operations are difficult because of the sensitive and limited nature of the bond market, and because of the risk of affecting the price and yield of Government securities'[2].

Treasury bills and other short-term Government securities, however, afford such central banks a better opportunity for open-market operations, although operations in long-term securities to the extent that they can be undertaken will, of course, still be necessary in order to widen the direct influence of open-market policy. The question is mainly one of establishing an open market for Treasury bills, and judging by experience the active co-operation of the central bank is essential for the establishment and maintenance of such a market. In this respect, the central bank can serve a very useful purpose by declaring itself ready at all times to buy Treasury bills from third parties at a moderate rate. With this assurance from the central bank, the Treasury bill represents the best available means of developing a money market in the countries in question, as the trade bill and bankers' acceptance are not used to any great extent, and as the trade bills that are available for discount are, moreover, discounted by the commercial banks directly for their customers and remain[3] with their local or overseas offices till maturity.

In a number of these countries, a great deal has already been done in the direction of developing a money market based on the Treasury bill as the staple medium and on the active co-operation of the central bank. In Canada, for example, the introduction of three-months' Treasury bills and of the tender system and the

reasons: first, the narrowness of the capital markets obstructs trading and, second, the elasticity of the banks' cash proportions necessitates so much the more trading if its influence upon the banks is to be effective', but he rightly points out that 'actually these two causes are not independent,' as it is because of the narrowness of the markets 'that the banks have had to accustom themselves to wide variations of their reserve proportions'. (*Central Banking in the British Dominions*, pp 256-57)

[1] *Monthly Report of Bank of Norway*, February, 1936

[2] *Report of Royal Monetary and Banking Commission* (1937), p 68

[3] Except, of course, when rediscounted with the central bank.

willingness of the Bank of Canada to buy Treasury bills have assisted considerably in widening the scope of the market for such bills. In referring to the desirability of developing a bill market in Canada, the Governor of the Bank of Canada is reported to have said early in 1936 that this could be attained on three conditions, namely, a sufficient volume of Treasury bills, a good institutional distribution of Treasury bills, and an established practice amongst the commercial banks of regarding their holdings of Treasury bills as a secondary reserve.[1]

Canada has also, with the assistance of its central bank, developed a fairly active market in the longer-term Government securities. Plumptre,[2] for example, admits that the open-market operations of the Bank of Canada 'serve in some degree to broaden the Canadian bond market'; that 'at the least the Bank must be one more dealer in the market'; and that 'it is probably more than this because the other dealers are inclined to give its daily price lists and its other activities more than ordinary attention'; and that the switching operations (trading of one type of Government bond for another) which the Bank is reported to undertake at times constitute 'a useful form of participation in the bond market because it keeps the Bank in touch with affairs, and meets the demands of other traders, without involving the Bank in any change in the aggregate of its security holdings or in the reserves of the commercial banks'

With regard to the use of open-market operations as an instrument of credit adjustment, it was stated in the annual report of the Bank of Canada for 1937 that an increase in the Bank's security holdings takes place during the closing months of each year, because it has been the Bank's policy 'to provide additional cash to offset the seasonal increase in the amount of notes in the hands of the public', and because it is 'the time of the year when the chartered banks desire to build up their cash reserves'. 'When year-end movements of this character are taking place, the short-term investments of the Bank of Canada tend to rise, since the market for Treasury bills and other short-term securities would not be capable of absorbing the holdings which the chartered banks may desire to part with temporarily, unless support were given by the central bank In the absence of such support, considerable and quite unnecessary dislocation in the capital market would result'. Apart from the continuance of oper-

[1] *Midland Bank Monthly Review*, July-August, 1937
[2] Op cit, pp 233-34

ations for these purposes, the Bank of Canada, like the central banks of several other belligerent countries, conducted open-market operations as one of the means of financing the war effort [1]

In India, the tender system of the issue of Treasury bills through the central bank was also adopted soon after its establishment, and the Reserve Bank, moreover, assisted in the widening of the market for Treasury bills, both Central and Provincial, by offering to rediscount such bills at rates only slightly higher than those prevailing at the nearest weekly tender According to its annual report for 1937, it was 'also considering whether it would be possible to develop open-market operations in trade bills', but there were 'many difficulties in the way, not the least of which was the stamp duty on bills'. Although the Indian Government reduced the stamp duty on domestic bills to a uniform level of 2 annas per 1,000 rupees in 1940, little progress was made with the development of a bill market until January, 1952, when a new scheme was introduced for the encouragement of usance bills or promissory notes. Thus, the Reserve Bank induced the larger commercial banks to arrange with their customers for part of their loans or overdrafts to be converted into 90-day bills or promissory notes, by undertaking to grant advances to the banks on the security of such paper at $\frac{1}{2}$ per cent. below the Bank rate; and as a concession to the borrowers the Bank also agreed to bear half the cost of the stamp duty incurred in converting loans or overdrafts into bills or promissory notes. After its first year of operation, the experiment was declared by the Bank to have successfully served its purpose of increasing the flexibility of the credit structure of India by providing for a sound mechanism of credit expansion in the busy season and credit contraction in the slack season.

In such countries as Australia, South Africa and New Zealand, attempts have likewise been made to establish an open market in Treasury bills. In South Africa, for example, the Reserve Bank entered into an arrangement with the Union Treasury in 1927, under which the latter was to issue three-months' Treasury bills through the Bank, while the Bank undertook to buy them back in the event of the holders thereof requiring funds after the bills had run for not less than fourteen days, but at $\frac{1}{8}$ per cent. above

[1] In 1943, for example, the Bank of Canada increased its holdings of Government securities by \$244,000,000 'in order to offset the effect upon the chartered banks' cash reserves of the increase in the active circulation, and also to bring about some increase in those cash reserves' (Annual Report for 1943).

the rate at which they had been issued. In 1928, however, the Reserve Bank decided to discontinue this arrangement, partly because the Bank regarded its own position as being prejudiced by the obligation to buy back at any time large amounts of Treasury bills at rates fixed in advance instead of those determined by the prevailing monetary conditions, and partly because the other banks had in the meantime provided competitive facilities for the temporary employment of surplus funds in the Union by raising their interest rates on fixed deposits to the level of the rates on Treasury bills and by paying interest on deposits of £10,000 for periods of less than three months, subject to one month's notice. The Bank then adopted the practice of discounting Treasury bills at rates fixed from time to time, depending upon the prevailing conditions and the current rates paid by the Treasury. In this manner the Bank performed a useful function and widened the market for Treasury bills. In recent years the Bank has also helped to create a more active market in Government securities generally by quoting buying and selling prices based on a pattern of rates for the various maturities of Government stocks which it has laid down from time to time according to the circumstances of the current financial situation. In this connection, its general aim has been both to establish appropriate relationships between the rates for different maturities and to maintain orderly conditions in the gilt-edged market whether the circumstances demanded an upward or a downward adjustment or relative stability, and thus to avoid unwarranted fluctuations.

In Australia, an attempt by the Commonwealth Bank in 1936 to issue Treasury bills[1] to the public as an initial step in the development of a market, instead of only to the banks as had been the practice up to that time, was likewise frustrated by the decision of one of the banks, followed subsequently by the others, to raise the three-months' deposit rate above the rate at which the Treasury bills were offered to the public. In 1937 the Royal Monetary and Banking Commission[2] reported that, in their opinion, it would be desirable to have an open market for Treasury bills in the form of regular offers of such bills for public tender at rates to be determined by the tenders received, and that it would be essential for the Commonwealth Bank to be free to tender for any amount. They also expressed the opinion that, if an open market were established and the public as well as

[1] Out of its own holding
[2] Pages 234 and 235 of Report

the trading banks were accustomed to holding and dealing in Treasury bills, the power of the Commonwealth Bank to regulate credit might be strengthened through the opportunity to buy or sell Treasury bills, and through its rate of rediscount.

In Argentina, the question of creating an open market and conducting open-market operations as a means of reducing or absorbing an excess of liquid funds was greatly facilitated by the fact that, at the time of its constitution, the Central Bank acquired 3 per cent. Consolidated Treasury Bonds[1] to the amount of 400 million pesos. When, therefore, in 1935-36 it desired to reduce the excessive liquidity that had arisen from the revaluation of gold and a favourable balance of payments, it succeeded in devising an ingenious method[2] of dealing not only with the problem of liquidity but also with that of laying the foundation of an open market. This method consisted of making three-months' paper, with no fixed interest, out of long-term and fixed-interest Treasury Bonds, by issuing Certificates of Participation in these Bonds. At first the Certificates were offered to the banks in amounts and at prices already fixed, but after a few months' experience the Bank decided to change this procedure and substitute that of fortnightly tenders and allotments to the highest bidders, which 'amongst other advantages allows oscillations of the money market to be closely followed'[3]. Moreover, the Certificates could be discounted at any time with the Central Bank at the minimum rate for rediscounts of bills bearing two signatures.

In addition to the fortnightly tenders for Participating Certificates, the Central Bank acted as the agent of the National Government in connection with the fortnightly tenders for Treasury bills for the Government's own requirements. Other issues of Treasury bills were made by the Bank in part payment for the purchases of exchange on behalf of the Foreign Exchange Fund. These issues were authorised by the Treasury at the request of the Bank, which desired to increase its capacity for

[1] These bonds did not constitute a new Government issue, but were merely the result of the conversion of Treasury bills and other Government securities held by the Banco de la Nacion and the Caja de Conversion and transferred to the Central Bank on its establishment

[2] Another method of absorbing liquid funds was that of redeeming foreign debt of the Argentine Government to the amount of 357 million pesos (about £24,000,000), during 1936 and 1937, out of the proceeds of Government bonds and Treasury bills issued in Argentina and out of exchange profits, and this was again resorted to on a large scale during World War II.

[3] *Annual Report of Central Bank of Argentina for 1936*, p 6

absorbing an excess of liquid funds, and the interest on these bills was not to be borne by the Treasury but was to be paid for out of an additional commission on purchases and sales of exchange. The Central Bank was assisted in its efforts 'made during 1938 to establish and develop a short-term Treasury Bill market' by the exemption of Treasury bills from income tax and stamp duties and by the institution of bearer bills.

The Central Bank of Argentina has also conducted open-market operations in Government bonds as a regulatory measure. In referring to the progressive increase in the quotations of Government bonds during 1941, as a result of an abundance of available funds in Argentina caused by the inflow of capital and the grain purchases of the Government, the Bank reported that it 'intervened to regulate the market without running counter to its natural tendency and, in this case, prevented the rises from occurring abruptly which might have entailed the risk of disturbing reactions.' At other times again it made 'large purchases of securities which contributed to steady the stock market and to restore confidence in banking circles', such as 'at the outbreak of war, at the time of the fall of France and . when the United States entered the war'; and 'in all these cases the movement was of a temporary nature and the bonds acquired by the regulatory institution were soon absorbed once again by the market'. The Bank pointed out, however, that the legal limitation imposed on its purchases of national securities was unduly severe and that 'the powers with which it has been invested to intervene in the stock market for regulatory purposes in an emergency situation should be extended'[2].

Conclusion. It will be observed, therefore, that, while genuine open-market operations in both short- and long-term securities can in all circumstances be undertaken on a relatively large scale only by the Bank of England and the Federal Reserve System of the United States, the central banks of many other countries, old and new, have been exerting themselves to establish some or other form of open-market operations as a supplement to discount-rate policy, or as an instrument for neutralising seasonal movements or movements of Government funds or for insulating the internal credit structure from sudden and temporary changes in the balance of payments, or as a means of avoiding undue fluctuations in the absolute and relative prices and yields of Govern-

[1] *Annual Report for 1938*, p 33

[2] *Anrual Report for 1941*, pp 7-8 and 41-2

ment securities or of maintaining cheap money on grounds of public policy, or as a means of absorbing excess liquid funds

The immediate problem for many of these central banks has been the establishment or development of an open market for Treasury bills, which has been found all the more necessary in the absence of a sufficiently broad and active market in long-term Government securities and also, in some cases, of sufficiently wide powers of dealing in such securities For the purpose of an open market the following conditions have been found to be more or less essential, namely, a sufficient volume of Treasury bills; a not too uneven or irregular flow of maturities; the offer of Treasury bills to the banks and the general public on a weekly, fortnightly or monthly tender basis, preferably under the aegis of the central bank which should also be allowed to tender, the use by banks of Treasury bills as a secondary reserve; and an undertaking by the central bank that it would always be prepared to discount Treasury bills for third parties at a rate not far removed from the current rate at which such bills are issued. The establishment of one or more bill dealers or brokers would be of great assistance, but not essential, to an open market

The central bank, with its branches in the principal towns, can operate satisfactorily as the agent of the Treasury, receiving tenders for Treasury bills and issuing them to the highest bidders, and financing the Treasury with ways and means advances at times in order to avoid a too uneven flow of maturities or to tide the Treasury over the intervening period in the event of unsatisfactory or insufficient tenders. On the other hand, the central bank requires the active co-operation of the Treasury in attaining some of the conditions, such as the issue of Treasury bills on a tender basis, a relatively even flow of maturities, and a sufficient volume of bills. To attain the last-named condition in some countries, the Treasury may even have to consider redeeming a long-term loan at maturity out of the proceeds of new Treasury bills instead of converting it.

In many countries, some of which were faced even before the war with the problem of absorbing an excess of liquid funds caused by the inflow of capital or favourable balances of payments on current account or revaluation of gold stocks or increased output of gold, the central banks were handicapped by the fact that they did not have at their disposal any Treasury bills or other Government securities over and above what they considered to be their minimum holdings as a source of income, and that even if

they were prepared to sacrifice the income by selling these securities, they could only absorb a part of the liquid funds with their holdings. In Sweden, an attempt was made to overcome this difficulty by arranging for the creation of special securities by the Treasury for sale by the central bank to the market; and in Argentina, where the central bank had a substantial holding of Government securities, special securities were created as an additional means of absorbing liquid funds.[1] The disadvantage of this expedient is, however, that it is artificial and may, like all artificial measures, complicate matters in the end. In any event, if such securities are created, the Treasury would ordinarily not be prepared to pay interest on securities the proceeds of which it did not need for its own purposes; and the central bank would have to pay it out of its own resources, as was arranged in Sweden, or out of a new commission or other charge, as was devised in Argentina in connection with the issue of Treasury bills for the purchase of exchange. In Switzerland, Portugal, Mexico, India, China, Egypt, Greece and Chile, the sale of gold in one form or another was resorted to as a means of absorbing part of the liquid funds, while in India, Argentina and South Africa all the Government securities domiciled overseas which could be obtained under vesting orders or otherwise were repatriated with that object in view.

With regard to future open-market operations in the countries where the central banks have acquired large blocks of Government securities in the course of facilitating the financing of the war or in other ways, it would appear at first sight that they have now got the requisite means for carrying out an effective open-market policy It was submitted, for example, by the Board of Governors of the Federal Reserve System in their Annual Report for 1938 that, since the large holdings of Government securities by the banks (over one-third of their total earning assets at that time) now made them more sensitive to changes in bond prices, and since sales of Government securities by the System (which also had acquired relatively large holdings) would, in addition to their effects on bank reserves, have a direct effect on the capital market of which these securities now constituted an important

[1] In Guatemala, the new law of 1945 provides that, for the purpose of stabilising the money market, the Monetary Board may order the issue by the Bank of Guatemala of freely negotiable 'stabilisation bonds', which the Bank may repurchase either in the market or through redemption The new Central Banks of Ceylon and the Philippines were also empowered to issue their own securities in order to make their open-market operations more effective

part, it might not prove necessary in the future, as it had been in the past, for banks to be without excess reserves and actually to be borrowing from the Reserve Banks in order to make them responsive to restraining influences. Since that time, the huge requirements of war finance in the United States as in various other countries have considerably increased not only the relative importance of the markets for short- and long-term Government securities in the financial structure of such countries, but also the volume and variety of such securities in the hands of both the central and the commercial banks.

On closer analysis, however, other points seem to call for consideration. Firstly, the arguments advanced above by the Board of Governors will play a significant part in the open-market policy of the future only if the central banks are given a relatively free hand in all matters pertaining to monetary policy. In other words, the course of events since 1930 has indeed placed large blocks of Government securities in the hands of central banks and thus given them the technical means for bringing about contraction of credit, but it has also made Governments much more dependent on the money and capital markets and more interested in low money rates.

A further point which has to be considered in this connection is the one which was brought out by Plumptre,[1] in his discussion of the effect of future open-market operations by the Bank of Canada upon the credit policies of the commercial banks, namely, that the holding of so many securities by the commercial banks 'means that their policies regarding commercial loans are insulated from the influence of the central bank's operations', as 'no contraction of their reserves within the realm of probability would suffice to prohibit an expansion of their loans because they stand so ready to meet a loss of reserves by selling securities or by allowing them to run off at maturity'. The only thing that would deter commercial banks from selling many securities for this purpose under such circumstances would be the effect on prices of concurrent heavy sales by the central bank, but this would also deter the Government from allowing the central bank to follow this line of action to any appreciable extent, except in special circumstances.

With regard to open-market operations in the future, the least that can be said is that, provided they are given the requisite powers of dealing in securities according as the circumstances

[1] Op cit, p. 244

may demand, central banks in all kinds of countries can, with advantage, undertake such operations as an instrument for neutralising movements of Government funds and seasonal movements generally or for insulating the credit structure from sudden and temporary changes in the balance of payments (as has been done directly or indirectly by the Bank of England, the Federal Reserve System and the Bank of Canada), or as a means of avoiding undue fluctuations in the prices of Government securities (as has been openly done and admitted by the Federal Reserve System, the Bank of France, the South African Reserve Bank, and the Central Bank of Argentina) or of correcting undesirable or unjustified spreads between the yields of various Government securities (as in the case of the Bank of Canada and the South African Reserve Bank), or as one of the means of absorbing an excess of liquid funds (as was openly attempted by the Riksbank of Sweden and the Central Bank of Argentina in 1936-38 and by the Federal Reserve System in 1939-40), or as an instrument for maintaining cheap money when the surrounding circumstances justify such action. These operations will at least help to broaden the markets for short- and long-term Government securities and such other securities[1] as the central banks are permitted to deal in, and will thus encourage the commercial banks to maintain relatively stable cash ratios which in turn constitute an essential feature of an effective open-market policy in the long run.

[1] In countries where Government securities do not represent a sufficiently important and sensitive part of the financial structure, it would appear necessary to grant the central bank the power to deal also in Government-guaranteed and municipal securities (as in several countries), or bonds of special mortgage banks (as in Norway and Salvador), or mortgage-bond certificates (where there is a market for such certificates as in Denmark), or railway bonds (as in Germany), or stocks and debentures of public utility corporations or 'other interest-bearing and readily negotiable securities' (as in Norway), or in securities generally at the discretion of the central bank (as provided in the new South African Reserve Bank Act.)

CHAPTER XIII

OTHER METHODS OF CREDIT CONTROL

Rationing of Credit. Towards the end of the eighteenth century, rationing of credit was found to be employed as an instrument of credit control by the Bank of England, which placed a limit upon its discounts for any one house or rejected a proportion of each discount application whenever total demands exceeded the sum which it was prepared to discount on any one day.[1]

As long as the Bank was prohibited by the usury law from raising its discount rate beyond the maximum of 5 per cent., it was obliged to resort to other methods of restricting the demands for accommodation made upon it during times of stringency and declining gold reserves; and the methods which it chose to use under the circumstances were not only the rationing of credit by limiting the amount available to each applicant, but also the shortening of the currency of bills eligible for rediscount. Both these methods invariably elicited severe protests, since they tended at times to operate very harshly and unjustly against certain houses and certain trades, and also to engender fears of a panic or crisis whenever a credit stringency developed.

The usury law was relaxed in 1833, when bills of exchange of up to three months were exempted from the legal restriction, followed a few years later by the extension of the exemption to bills of any currency. Bank rate was, however, not used as an instrument of control till 1839, and it was not until after the Bank Act of 1844 was brought into operation that the Bank came to rely upon Bank rate as its primary weapon. It was then decided to discontinue rationing credit either as an alternative or as a supplement to a rise in Bank rate, since the Bank was gradually developing in the direction of accepting the position of being the lender of last resort, and since the allocation of credit quotas or other forms of arbitrary credit restriction in a crisis were clearly difficult to reconcile with the duty and responsibility of the lender of last resort. This situation developed also in other countries,

[1] See King's *History of the London Discount Market*, pp. 13 and 71.

according as the discount rate came to be adopted as the principal weapon. It was only under war or other highly abnormal conditions that further instances of credit rationing by some Continental central banks emerged from time to time.

In recent times, owing to the exceptionally difficult and critical conditions with which some countries had to contend as a result, directly or indirectly, of the aftermath of the war of 1914-18, credit rationing in one form or another was adopted on several occasions by the central banks of such countries Wagemann,[1] for example, said that under the pressure of necessity credit rationing might be said to have been 'rediscovered' for the purpose of credit control He also quoted examples of credit rationing and credit restriction in Germany in 1924, 'when the currency which had been stabilised by the introduction of the Rentenmark was endangered'; in 1929, 'when the Paris negotiations in connection with the Young Plan led to the withdrawal of foreign money from Germany and to attacks on the German currency', and when 'the Reichsbank wanted by means of credit restriction to force the banks to do everything in their power to counteract this manoeuvre'; and in 1931, when 'the Reichsbank used credit quotas to prevent the collapse of the large banks' After 1931, Germany preferred to exercise general control over the capital market, which will be discussed in Chapter XV.

According to Mildred Northrop,[2] who has made an interesting analysis of the Reichsbank's technique of credit restriction and rationing during the years 1924-26, 'some control action was essential on the part of the central bank because the speculative boom of the rentenmark cycle had got out of hand', and 'a complete understanding of the conditions present in Germany in April, 1924, precludes any possibility of arguing that the Reichsbank should have controlled this situation through an increase in its discount rate'. To her 'it seems evident that the firm stand taken and maintained by the Reichsbank was one of the strongest factors that prepared the way for the relative prosperity of the later years', but 'to hold that the restriction and rationing policy of the Reichsbank completely attained its end is obviously unsupportable', since *inter alia* 'it is probably true that many worthy industries suffered undue hardships or were even forced into bankruptcy because of lack of credit'. She claimed that 'the use of this technique by the Reichsbank seems to be the outstand-

[1] *Wirthschaftspolitische Strategie*, pp. 321-25

[2] *Control Policies of the Reichsbank, 1924-33*, pp. 336-361.

ing example in the history of central banking'.

In Soviet Russia, credit rationing by the central bank became an important factor in general economic policy. Katzenellenbaum[1] points out that the discount rate of the central bank, the State Bank of the U.S.S.R., 'is neither an index of the supply and demand of loan funds nor a regulator of such supply', but that 'the State Bank is guided by another principle in regard to the investment of its inflowing funds, namely, the allocation of funds among financially sound credit aspirants in accordance with a definite plan', and that 'at times when the demands for credit exceed the State Bank's available resources . . . the State Bank is obliged to divide these funds in some definite way among the enterprises which have need of them'.

In fact, rationing of credit and capital is a logical concomitant of the intensive and extensive planning adopted by authoritarian States.

There is no doubt that credit rationing can be employed as a decisive method of credit control. Apart from its logical application in authoritarian economies, Wagemann[2] claims that 'in more primitive economic conditions, the setting of credit quotas is the only decisive method which the central bank has in order to prevent excessive credit demands on the part of business'. In Mexico, for example, such circumstances as the rigid economic structure of the country and the slight development of the local money market have, according to Ostos[3], 'compelled the Bank of Mexico to continue employing until this day the rationing of credit as principal regulating weapon'. Since 1936, the credit limits fixed by the Bank of Mexico have been based on the amount of the resources of each member bank or other associated institution.

France is another country which has resorted to credit rationing under abnormal conditions. Thus, as from October 1st, 1948, the Bank of France laid down a rediscount ceiling for each commercial bank based on the level prevailing at that date.

Unless, however, rationing of credit is accompanied by such efficient control and complete regimentation of the body economic as can be approximated only in very few countries, it is a method which is open to serious abuses and inequalities of application[4]

[1] *Foreign Banking Systems*, Edited by Willis and Beckhart, pp 953-4

[2] Op cit, p. 321.

[3] Article on the Bank of Mexico as Appendix I to *Banca Central* (published in 1941 as the Spanish edition of the author's *Central Banking*), p 456

[4] The President of the Reichsbank, in dealing with the rationing of credit by that bank during the 1924-26 period, referred to credit rationing as 'an extremely im-

and cannot, in any case, be reconciled with the assumption by the central bank of the position of the lender of last resort. In short, it can be justified only as a temporary expedient or an abnormal measure dictated by special circumstances, or as part of a comprehensive scheme of national economic planning.

Direct Action. In one form or another direct action has been used at various times by central banks, either as an alternative to discount-rate policy or to open-market operations or in conjunction with them. In the wider sense direct action may be taken to include moral suasion; i e. moral suasion may be regarded as one of the forms of direct action and has been treated in this manner by several writers. In general, however, it appears to be desirable to make a clear distinction between the two, 'direct action'[1] embracing only those cases where the central bank decides to take such coercive measures against an offending commercial or other financial institution as it can within the limits of its powers and functions, or to issue directives to banks generally concerning their lending and investment operations under special statutory authority, while 'moral suasion' refers to those cases where the central bank endeavours to achieve its object by making suitable representations to the institutions concerned and relying on its moral influence and power of persuasion.

In the absence of special powers, direct action[2] may take the form either of a refusal on the part of the central bank to rediscount for banks whose credit policy is regarded as being inconsistent with the maintenance of sound credit conditions, or a refusal to grant further rediscounts to banks whose borrowings from the central bank are considered to be excessive in relation to their capital and reserves or to their proportionate share (as compared with the other banks) of the resources of the central bank. Where the central bank desires to avoid having to detract

perfect and undesirable form of action for a bank of issue', but justified its use by the Reichsbank on the ground that 'extraordinary situations call for extraordinary remedies, and cannot always be mastered by the theoretical rules evolved for normal conditions' Schacht's *Stabilisation of the Mark*, p 203

[1] 'Direct action' has derived its designation from the fact that it implies direct dealing with individual banks, whereas discount-rate policy is applied generally and objectively to all institutions which have to borrow from the central bank, and whereas open-market operations are characterised by their impersonal application as well as by their repercussions on banks and the money market generally

[2] An unusual type of direct action was employed by the Central Bank of Argentina in April, 1937, when, in order to check the inflow of foreign funds, the Bank made it an essential condition for subscriptions to Certificates of Participation in Consolidated Bonds that the subscribing banks 'should undertake, throughout the life of the Certificates, not to pay interest on new deposits by foreign banks or firms or on funds from abroad in general'.

from its position as the lender of last resort, it need not actually refuse to rediscount, but may charge such banks varying penalty rates over and above the official discount rate.

Direct action of the former kind was at times given great prominence in the United States in the reports and pronouncements of the Federal Reserve System as well as in public discussion, particularly during the period 1928-29 when the Federal Reserve Board preferred it to the use of the discount rate as a means of dealing with an abnormal speculative situation, notwithstanding strong representations by the Federal Reserve Bank of New York for permission to make further increases in its discount rate Under the Banking Acts of 1933 and 1935, the Board of Governors of the Federal Reserve System were given much wider powers not only over the Reserve Banks, but also over the lending operations of member banks. It is provided that each Federal Reserve Bank is to keep itself informed of the general character and amount of the loans and investments of its member banks, with a view to ascertaining whether undue use is made of bank credit for speculation in securities, real estate or commodities, and that in determining whether to grant or refuse advances, rediscounts or other credit accommodations, the Federal Reserve Banks shall give consideration to such information If, in the opinion of the Board, any undue use of bank credit for the purposes mentioned is made by a member bank, the Board may suspend such bank from the use of Federal Reserve credit facilities, even if the Federal Reserve Bank concerned is not prepared to recommend it. The Board may also direct any member bank to refrain from further increase of its loans secured by stock or bond collateral for any period up to one year, under penalty of suspension of all rediscount facilities at Federal Reserve Banks. Furthermore, the Board is empowered to fix from time to time for each Federal Reserve district the percentage of each individual bank's capital and surplus which may be represented by loans secured by stock or bond collateral.

While these new powers were regarded at the time as providing a wider and stronger basis for direct action by the Federal Reserve System, they have been found in practice to be inadequate and ineffective for the purpose of qualitative control of credit in the circumstances prevailing in the United States. Apart from the fact that the elements of discrimination and punitive action associated with any direct action under those powers are not generally conducive to the attainment of positive results in a

country where there are thousands of independent banks, such direct action can in any case be applied only if the offending banks are short of funds and cannot replenish their reserves from outside sources. In this connection, it may again be mentioned that between 1934 and 1951 the commercial banks in the United States had, for one reason or another, enjoyed a relatively ample supply of cash and had, therefore, seldom required accommodation from their Federal Reserve Banks

In view of the difficulties experienced by central banks in applying effective direct action without adequate powers, several countries decided to give their central banks the power of direct control over the credit operations of the commercial banks, as had already been done in Soviet Russia, Nazi Germany and Fascist Italy. Thus, in Australia, as a wartime measure, it was prescribed by regulation that, in making advances or investments, 'a trading bank shall comply with the policy laid down by the Commonwealth Bank from time to time'. Under the Banking Act of 1945, it is further provided that, where it is deemed necessary or expedient to do so, 'the Commonwealth Bank may determine the policy in relation to advances to be followed by banks . . and may give directions as to the classes of purposes for which advances may or may not be made by banks'. Moreover, the banks could not, except with the consent in writing of the Commonwealth Bank, purchase or subscribe to any Australian Government, local or other securities[1] Similar powers were granted to the Reserve Bank of New Zealand as a wartime measure and continued after the war.

After the war, the principle of conferring upon the central bank the statutory power, in one form or another, to control the lending and investment operations of the commercial banks, was considerably extended, particularly where the central bank came to be nationalised or was already owned by the State. Thus, in the new Communist States of Europe, as in Russia, the central bank, operating under the direct control of the Government, was made responsible for financing practically the whole economy of the country. In Argentina, moreover, the nationalized central bank was invested with absolute power over the commercial banks. In France the four largest commercial banks were

[1] According to the explanatory memorandum issued by the Australian Treasury at the time, these powers were granted to the Commonwealth Bank 'to ensure that at all times the credit resources of the nation are put to the best use, and that the making of advances by banks does not lead to an unbalanced expansion of credit in any particular field'.

also nationalized when the Bank of France was nationalized in 1946, and the latter was given representation on the Boards of Directors of those banks while its Governor, in addition to being President of the Banking Control Commission, was made Vice-President of the new National Credit Council (with the Minister of Finance as President who may delegate his powers to the Vice-President). These two bodies together now have wide powers of control over the policy and operations of the French banking system.

Certain powers of quantitative and/or qualitative control of commercial bank credit were also granted to the central banks of England, Holland, Western Germany, India, Guatemala and some other Latin-American countries. In the case of the Bank of England, however, the Nationalization Act of 1946 provides merely that the Bank may, 'if they think it necessary in the public interest, request information from and make recommendations to bankers, and may, if so authorized by the Treasury, issue directions to any banker for the purpose of securing that effect is given to any such request or recommendation'. In India, on the other hand, the nationalized central bank was directly authorized to determine the general advance policy to be followed by the commercial banks and to lay down the purposes for which bank advances may or may not be made, the margins to be maintained and the rate of interest to be charged on advances.

Most of the new central banks established after the war were likewise given wide powers of control over bank advances and investments. The Central Banks of Ceylon and the Philippines, for example, have the power to fix maximum maturities for bank loans and investments and the nature and the amount of security required for various types of credit operation, and to prohibit an increase in such loans and investments or to limit the rate of increase.

While it is still too early to judge what degree of sustained success the central banks concerned are likely to have with the exercise of their powers of control over the credit operations of the commercial banks, it seems to be clear that without such wide powers direct action has little chance of being made effective in the long run. There are, however, several limitations to be reckoned with, namely, the difficulty for both central and commercial banks to make clear-cut distinctions at all times and in all cases between essential and non-essential industries, productive and unproductive activities, investment and speculation, or between

legitimate and excessive speculation or consumption; the further difficulty of controlling the ultimate use of credit by second, third or fourth parties; the dangers involved in the division of responsibility between the central bank and the commercial banks for the soundness of the lending operations of the latter; and the possibility of forfeiting the wholehearted and active co-operation of the commercial banks as a result of undue control and intervention.

Moral Suasion. As compared with direct action, moral suasion has at least the advantage of creating a less unfavourable psychological reaction, since it is not accompanied by statutory or administrative compulsion or threats of punitive action. If any sign of compulsion or of a threat can be detected therein, it should be regarded as a friendly and well-meant warning or as strongly-worded advice rather than as indirect compulsion. The use of moral suasion, wherever possible, makes it easier for the central bank to secure the willing and active co-operation of the commercial banks in the spirit as well as the letter; and without such co-operation the central bank cannot hope to achieve tangible results in the long run in the direction of qualitative control of credit Moreover, whereas direct action in the narrow sense can be applied only to institutions (primarily the commercial banks in most countries) which are actually indebted to the central bank or which approach it for accommodation, moral suasion can be adopted by the central bank for the purpose of trying to exert an appropriate influence also on the non-borrowing commercial banks and the other kinds of credit and financial institutions which have, as stated in Chapter VIII, acquired in recent times a relatively important place in the credit and financial structure of most countries, and whose operations can, therefore, seriously frustrate the credit policy of the central bank.

Moral suasion has been employed as a method of credit control by the central banks of many countries. In such countries as Great Britain,[1] France, Sweden and Holland, where the acceptance of the financial leadership of the central bank has become tradition, it is generally recognised that the central bank normally exerts its influence with a considerable measure of success. Even several of

[1] At the celebration of the 250th anniversary of the Bank of England in July, 1944, the Chancellor of the Exchequer said. 'The position of the Bank to-day was not, however, entirely due to the excellence of its technique or to the sheer strength of its financial position It was due to its great moral influence in the world of finance' (*Old Lady of Threadneedle Street*, September, 1944)

the new central banks, particularly those in Canada, Australia, Argentina, South Africa and New Zealand, where banking resources have been concentrated mainly in the hands of a small number of large commercial banks, have succeeded in attaining a position where their moral influence on at least the commercial banks has become an important factor In fact, in recent years Great Britain, Canada and South Africa have used moral suasion on an extensive scale as an instrument of credit control.

In a country such as the United States, where there are 14,000 commercial banks most of which usually have large cash reserves at their disposal and many of which are not members of the central banking system, it is naturally more difficult for the central bank to exercise its moral influence over the whole banking structure. Burgess[1] nevertheless expressed the view that 'the Reserve Banks may at times exercise an important influence on the general credit situation through the informal suggestions which they may make to bankers', and that 'the informal influence which they exercise in this way may at times prove more important than their formal action under the law', but that 'it is an influence to be exercised with the utmost discretion and would vanish with excessive use'.

On the basis of Federal Reserve experience, some American writers have not been inclined to regard moral suasion as of much practical significance unless it is set with teeth in the form of statutory powers of intervention and control. Clark,[2] for example, said that ' persuasion as a means of credit control has not been successful ' and that 'the efficacy of warnings as an instrument of credit control has been very slight', for 'while at times they no doubt have exerted a restraining influence the forces making for expansion have proved too powerful for warnings without any teeth in them to be effective'.

According to the testimony of the Federal Reserve Bank of New York before the Senate Committee on Banking and Currency in 1931, 'it is impracticable to use moral suasion as an effective part of a programme designed generally to restrict or control expansion in or use of Federal Reserve credit', and it is not 'possible for Federal Reserve banks by moral suasion or other means to prevent credit from being used for speculative or investment purposes as distinguished from other purposes'. It was also stated that, while 'some bankers are exceedingly anxious to

[1] *Reserve Banks and the Money Market* Revised Edition (Harper), p. 257
[2] *Central Banking under the Federal Reserve System* (Macmillan), pp 268 and 271.

co-operate with the reserve bank and are willing to sacrifice all other considerations to an accomplishment of that purpose', 'others resent any suggestions as to how they should run their own business and are but little affected by anything less than most drastic methods'; and that 'moral suasion, if effective, is bound to lead to discrimination, as it merely drives business from the co-operative bank to another less co-operative one' Moreover, in their opinion 'there is no doubt that much can be done by direct contacts with bank officers, and in cases where the individual bank is borrowing in a manner which requires special treatment the method of direct contact must necessarily be employed', but 'it is a slow operation and, when many banks are to be dealt with, it does not produce results nearly so promptly, effectively, or equitably as does a change in rate', the reaction to which 'is sufficiently uniform to bring about prompt movement in the direction in which the rate should operate'.

In Germany moral suasion had to be employed on various occasions by the Reichsbank. Mildred Northrop[1] gave examples of the Reichsbank's use of 'warnings backed up solely with publicity in fields where control lay wholly outside of the province of the central bank', and 'warnings accompanied by threats of drastic central bank action unless the dangerous tendency was modified'. As an example of the latter was given the attempt by the Reichsbank, in the spring of 1927, 'to force greater liquidity upon the German commercial banks' and 'check stock market speculation' by warning them against 'foreign short-term borrowing (particularly for stock market speculation)' and 'their continued dependence upon central bank support for stock exchange commitments'. At first 'these warnings were not heeded' by the banks, and the Reichsbank only achieved its objective when it threatened them with credit restriction if they did not 'put their affairs in a more liquid position'.

To sum up, therefore, while there is scope for the useful application by central banks of moral suasion, its limitations in various directions must be fully recognised. In countries where there are highly liquid monetary conditions and where the central bank either cannot undertake open-market operations at all or cannot do so on a scale sufficient to counteract the undue liquidity, it is advisable if not essential for the central bank to use moral suasion as far as possible, in spite of its limitations. Its success would depend largely on the prestige and personal authority of the

[1] Op cit, pp 369 and 377-8.

central bank; the technical means and statutory powers at the disposal of the central bank; the degree of co-operation between the central bank and the commercial banks as well as other financial institutions; and the make-up of the country's banking and credit structure.

Cash Reserve Requirements for Commercial Banks. In recent times a new method has been devised for the purpose of increasing or decreasing the available supply of bank cash, namely, that of giving the central banking authorities the power to decrease or increase the minimum cash reserves to be kept with the central bank by the commercial banks.

This method was first introduced in the United States in 1933 and amended in 1935, when legislation was passed empowering the Board of Governors of the Federal Reserve System to change the member banks' reserve requirements by regulation 'in order to prevent injurious credit expansion or contraction', the minimum reserve percentages not to be less than those existing at the time nor more than twice such percentages This power to change the minimum reserves to be kept with the Reserve Banks by the member banks was intended as an additional means of enabling the Reserve Banks to control the money market and to contract or expand the credit-creating capacity of the member banks. It was brought into use for the first time in August, 1936, when the reserve requirements were raised by one-half because of the fear that the big increase in the cash reserves of the member banks resulting from the heavy inflow of gold might be used as a basis of injurious credit expansion. As the Board of Governors[1] said at the time, 'it is far better to sterilise a part of these superfluous reserves while they are still unused than to permit a credit structure to be erected upon them and then to withdraw the foundation of the structure'; and in the Annual Report of the Federal Reserve Bank of New York for 1936 it was stated that the principal effect of the increased reserve requirements was 'not to restrict the current availability of money, but rather to limit the potential expansion of credit which might ultimately be based upon the reserves held by the banks'.

The result of the increase of 50 per cent. in the minimum reserves was that the excess reserve balances of the member banks (i.e. over and above the legal minimum) were reduced from \$3,100,000,000 to \$1,800,000,000; and this reduction brought the reserves, as explained by the Board of Governors, 'within

[1] *Federal Reserve Bulletin*, August, 1936

the scope of control through the System's open-market portfolio which consists of $2,430,000,000 of United States Government securities'.

The excess reserves of the member banks, however, again increased as a result of the continued inflow of gold, and by the end of 1936 they stood at $2,250,000,000. Accordingly the Board of Governors decided, in the beginning of 1937, to make a further increase in reserve requirements in two stages up to the limit allowed by legislation, namely, double the minimum reserves existing prior to August, 1936. On the 1st May, 1937, when the final increase was brought into effect, the excess reserves were reduced to $875,000,000; and on that occasion the Board of Governors[1] issued the following statement which affords a concise explanation of the motives and forces behind this new method:

'So long as member banks had a volume of reserves far in excess of legal requirements, the customary instruments of credit policy, open-market operations and discount rates, were wholly ineffective .... Through the elimination of about $3,000,000,000 of excess reserves, the Federal Reserve System was brought into closer contact with the market and was placed in a position where sales or purchases in the open market could tighten or ease credit conditions in accordance with the public interest. In this way open-market operations, a far more flexible instrument of credit policy than changes in reserve requirements, have once more become an effective means of exerting the System's influence on credit conditions.'

In April, 1938, however, 'as a part of the Government's programme for encouragement of business recovery'[2], the minimum reserves were reduced by 12½ per cent. from their new high level, thereby releasing approximately $750,000,000 of reserves. As a result of a further considerable inflow of gold, the excess reserves of member banks again increased to $3,600,000,000 by January, 1939, and to $6,646,000,000 by December, 1940, although they declined to $5,000,000,000 by October, 1941, owing to the growth in the amount of currency in circulation and

[1] *Federal Reserve Bulletin*, May, 1937

[2] Ibid, May, 1938 Moreover, in its Annual Report for 1938 (page 21) the Board of Governors of the Federal Reserve System referred to 'the so-called policy of monetary ease, which has been directed at keeping banks supplied with an abundant volume of reserves, so as to encourage them to expand their loans and investments', and which 'has been reflected in a decline in the carrying charges on mortgage debt for farmers and urban householders, has enabled many corporations to refund their debt at lower rates, and has lightened the cost of current financing to commerce, industry, and agriculture'

the increase in the required reserves resulting from the expansion of bank deposits This increase in excess reserves led to the restoration, as from 1st November, 1941, of the uppermost limit of reserve requirements allowed by legislation, namely, 26, 20 and 14 per cent of demand deposits for central reserve city banks, reserve city banks and country banks respectively, and 6 per cent. of time deposits for all member banks. It was declared to be 'a further step in the Government's programme for combating inflation'

After the entry of the United States into the war, there was a more rapid increase in the currency circulation and a further increase in bank deposits on account of bank purchases of Government securities, both of which had the effect of reducing the excess reserves of member banks. On 1st July, 1942, the excess reserves stood only at $2,259,000,000, while the prospective borrowing programme of the United States Government called for a much greater participation by the banking system in the financing of the war effort, and the contemplated expansion of war activities called for a continuous increase in the currency circulation

To cope with the new situation, the Board of Governors was empowered by legislation to change the reserve requirements of member banks in central reserve cities without changing requirements for member banks in other reserve cities or for country banks. On 20th August, 1942, the Board reduced the reserve requirements against demand deposits for central reserve city banks in New York and Chicago, where the decline in reserves was concentrated, from 26 to 24 per cent.; and this was further reduced to 22 per cent on 14th September and to 20 per cent. on 3rd October, 1942. As a further contribution towards meeting the need of the banks for additional reserves,[1] the Federal Reserve System expanded its open-market operations and increased its holdings of Government securities from $2,728,000,000 on 1st July, 1942, to $6,189,000,000 at the end of 1942 and $19,000,000,000 at the end of 1944.

The next change was not made until February, 1948, when the reserve requirement against demand deposits for central reserve

[1] Notwithstanding the System's large purchases of securities and the reduction in the reserve requirements for central reserve city banks, the excess reserves of all member banks amounted only to $1,406,000,000 at the end of 1944, for the reasons that the amount of money in circulation (outside the Federal Reserve Banks and the Treasury) had increased from $11,160,000,000 at the end of 1941 to $25,300,000,000 at the end of 1944, and that the minimum reserve balances of the member banks had, owing to the increase in their deposit liabilities, risen from $9,000,000,000 at the end of 1941, to $12,560,000,000 at the end of 1944

city banks was raised again from 20 to 22 per cent., followed by further increases to 24 per cent. in June and 26 per cent. in September, 1948 In the meantime, as a result of a strong plea by the Board of Governors for wider powers in order to be able to deal more effectively with the prevailing inflationary potential, the maximum limits of the reserve requirements were temporarily raised by Congress in August, 1948, by 4 per cent. in the case of demand deposits, and 1½ per cent in the case of time deposits. Thus, in September, 1948, the reserve to be maintained by reserve city and country banks against their demand deposits was also increased, namely, from 20 and 14 to 22 and 16 per cent. respectively, while that against time deposits for all member banks was increased from 6 to 7½ per cent.

During the period May-September, 1949, however, the Board was induced by a recession in business activity to lower the reserve requirements, in stages, by 4 and 2½ per cent. in the case of demand and time deposits respectively

In January, 1951, due to the renewed inflationary trend consequent upon the Korean war, the reserve requirements were raised once more to 24, 20 and 14 per cent. against the demand deposits of central reserve city, reserve city and country banks respectively, and to 6 per cent. against the time deposits of all member banks.

Then, in July, 1953, when a relatively severe monetary stringency existed, the Federal Reserve Board, 'in pursuance of a Federal Reserve policy designed to make available the reserve funds necessary to meet the essential needs of the economy and to help maintain stability of the dollar', lowered the reserve requirements to 22, 19 and 13 per cent. against the demand deposits of central reserve city, reserve city and country banks respectively, and again, in June–July, 1954, to 20, 18 and 12 per cent. respectively, while the requirement against time deposits was reduced to 5 per cent.

From this survey it is clear that the Federal Reserve authorities have employed the device of changes in reserve requirements, like open-market operations and in conjunction with them, not only as a means of counteracting cyclical fluctuations in business activity, but also as an emergency measure for dealing with a war or other abnormal situation

The introduction of this device as an additional instrument of credit control in the United States has attracted a great deal of attention in other countries where central banks have experienced

difficulty in controlling the credit situation and money-market conditions.

In New Zealand, legislation was passed in 1936 which empowered the Governor of the Reserve Bank, acting with the authority of the Minister of Finance, to vary the percentages of balances to be maintained by trading banks with the Reserve Bank, subject to such balances not being at any time less than those provided for in the original statute, namely, 3 per cent. of time liabilities and 7 per cent. of demand liabilities. In August, 1952, these ratios were actually raised to 5 and 10 per cent. respectively, and in April, 1953, to 10 and 20 per cent. respectively.

Mexico decided, in 1936, to adopt the formula which had previously been proposed by the 'Committee on Bank Reserves of the Federal Reserve System' but not carried into effect in the United States, namely, that the minimum reserves to be maintained with the central bank should be based on the activity as well as the volume of the deposits held by each member bank. Thus, every deposit-receiving bank in Mexico was required to keep with the Bank of Mexico a minimum balance amounting to 7 per cent of its deposit liabilities, plus 50 per cent. of the average daily payments on its deposit accounts. In addition, the Bank was empowered to raise the proportion of deposit liabilities from 7 to 15 per cent or reduce it to 3 per cent, and also to apply any such increase or decrease to one single category of deposits (sight, time or savings-account deposits) or to a definite banking zone In 1941, however, the provision for the inclusion of 50 per cent. of the average daily withdrawals was abolished, and the upper limit for the proportion of deposit liabilities, which the Bank of Mexico could fix as a minimum reserve balance to be maintained by any bank on any of its deposits, was raised from 15 to 20 per cent, while the lower limit was increased from 3 to 5 per cent. Finally, in 1942 the Bank was given authority, subject to the consent of the Treasury, to raise the proportion as high as 50 per cent. if the economic conditions warranted it. On account of the exceptionally liquid position of the Mexican banks in 1943, the maximum limit of 50 per cent. was actually applied to the deposits of banks in Mexico City

In Sweden, legislation was introduced in 1937 giving the Government the power to authorise the Riksbank, at the latter's request, to prescribe at will the minimum proportion of their legal reserves which the commercial banks should keep in the form of balances with the Riksbank. In 1950, when more stringent reserve regula-

tions were adopted as an instrument of credit control, it was laid down that at least one-quarter of the legal reserves was to be kept with the Riksbank; and the monetary authorities were empowered to increase the total reserve requirements for the commercial banks as well as to vary the proportion thereof which was to be maintained as a minimum balance with the Riksbank.

In Ecuador, the new law of 1937 required the commercial banks to keep with the Central Bank cash balances varying from 5 to 15 per cent. of their deposits, the exact percentage to be fixed by the Bank in accordance with conditions in the money market ; and the Central Bank of Venezuela, which was established in 1939, was likewise granted the right to regulate the minimum legal reserves of the commercial banks, subject to the consent of the Federal Executive.

In Australia, under the National Security (Wartime Banking Control) Regulations issued in 1941, every 'trading bank' was required to lodge in a Special Account with the Commonwealth Bank such part of its surplus investible funds (i.e. the amount by which its assets in Australia at any time exceed the average of its assets in Australia in August, 1939) as is directed by the Commonwealth Bank in accordance with a plan approved by the Treasurer. This wartime measure was designed to limit the profits of the commercial banks as well as to place their loan and investment activities under the control of the central bank and the Treasury. It was incorporated in the Banking Act of 1945 and was, therefore, continued as a peacetime measure. According to the explanatory memorandum issued by the Treasury, 'it has proved a simple, elastic and effective instrument of credit control and the Government considers that it should be used in the post-war years'; and 'if the central bank is to regulate the volume of credit it must . . . be able to ensure that the banks will have adequate liquid assets available in times of depression, but not too plentiful a supply in times of boom'.

With regard to the Central Bank of Ireland, which was established in 1942, it was provided that the Board of Directors could, with the consent of the Minister of Finance, issue regulations requiring every licensed banker to make with the Central Bank 'a deposit of a specified amount or calculated in a specified manner whenever after a specified date the assets held by him within the State fall below a specified proportion in relation to his liabilities within the State, and to maintain such deposit so long as such assets are below the said specified proportion'. This provision was made because of the banks' relatively large holdings of

external as compared with internal assets, and with the object of encouraging the banks to increase their investments in Eire and to sell some of their sterling holdings to the Central Bank. The Board was also empowered to prescribe different requirements for different banks owing to the variation in the character of their business and general liabilities

Furthermore, under a new law adopted by Guatemala at the end of 1945, the Monetary Board is empowered to determine, in a general and uniform manner, the minimum reserve balances which all banking institutions shall maintain in the Bank of Guatemala against their deposit liabilities in Guatemala, provided that the amount shall be not less than 10 per cent. nor more than 50 per cent for the various classes of deposits, and also to require the banks to maintain reserves of more than 50 per cent. against any increase in deposits above the amount outstanding at the time such requirement is laid down, subject to the Bank of Guatemala being ordered to pay interest on the part of the required reserves which exceeds 50 per cent of their deposit liabilities.

Moreover, the new central banks of Western Germany, Ceylon, Pakistan, Burma and the Philippines were also authorized to prescribe the minimum reserves to be held by the commercial banks. In Ceylon, a range of from 10 to 40 per cent. was allowed against demand deposits and unused balances of overdrafts, and from 5 to 20 per cent. against time and savings deposits During inflationary periods, however, a reserve of 100 per cent. against any increase in deposit liabilities may be imposed, but in such event interest must be paid by the central bank on the excess over the normal maximum reserve

Finally, the Bank of Canada was recently empowered to lay down the minimum cash reserves to be maintained by the commercial banks, between 8 and 12 per cent. of their total deposits, as compared with the previous fixed minimum of 5 per cent.

This method of changes in reserve requirements will probably tend to be more widely adopted and further developed, either as an alternative to open-market operations where they cannot be undertaken extensively or effectively or as a supplement to them, in order to strengthen the technique of central banking control under highly-liquid monetary conditions or, conversely, under conditions of severe credit stringency.

After saying that, when there are excess reserves, 'the surplus of reserves is not distributed evenly among the banks of the country (some banks have more excess, some less, and a few have

none)', and that 'when reserve requirements are increased some banks will be hit much harder than others', Burgess[1] concluded that 'despite these limitations the power (to raise or lower the banks' reserve requirements) is the most useful addition to the System's mechanism for credit control, especially as a means for dealing fundamentally with the large excess of reserves created by the extraordinary events of the depression emergency'.

There are, however, further limitations than the one mentioned by Burgess There is, for example, the fact that, like open-market operations, changes in reserve requirements have the effect of increasing or decreasing the available supply of bank cash, but such changes in bank cash do not always bring about corresponding or proportionate changes in the volume of credit actually created, either because commercial banks do not always seek to increase or decrease their loans and investments in accordance with the increase or decrease in the available supply of bank cash, or because the scope or demand for bank credit does not always increase or decrease in accordance with such increase or decrease and the lowering or raising of money rates which may result therefrom. Moreover, since changes in reserve requirements have a direct and immediate effect on the potential credit-creating capacity of all commercial banks and represent a powerful force to do good or harm to the banks and the community as a whole, the power to make such changes and the decision to do so at certain times throw an enormous responsibility on the central bank.

In short, while it is a very prompt and effective method of bringing about the desired changes in the available supply of bank cash, it has some technical and psychological limitations which prescribe that it should be used with moderation and discretion and only under obviously abnormal conditions.

Secondary Reserve Requirements for Commercial Banks. The principle of requiring commercial banks also to maintain minimum secondary or supplementary reserves in certain circumstances was formally raised by the Board of Governors of the Federal Reserve System in their Annual Report for 1945, when they asked for 'new powers that would serve as a partial substitute for those traditional powers which had become largely unusable in view of the huge public debt'. In short, the Board considered it necessary in the prevailing circumstances to have the power to call upon member banks to maintain not only minimum reserve balances with their respective Federal Reserve Banks, but also minimum holdings of

[1] *Reserve Banks and the Money Market* Revised Edition (Harper), p. 260

short-term Government securities and other liquid assets in order to limit their opportunities for disposing of such assets in order to increase their loans for general business purposes. The need for this additional power was repeated on various other occasions, particularly in a statement before the Joint Congressional Committee on the Economic Report, in April, 1948, when the Board specifically pleaded, *inter alia*, for the authority to impose such secondary reserve requirements on *all* banks, up to 25 per cent of their demand deposits and 10 per cent. of their time deposits, if they continued to expand credit for the private sector by selling Government securities. Notwithstanding these repeated representations, Congress failed to respond.

In the meantime, however, supplementary reserve requirements had been introduced in several other countries for the same reasons as those advanced by the Federal Reserve System. In some cases the central bank was directly empowered to impose such requirements, while in others the power was granted to another body which was closely associated with the central bank, such as the Banking Commission in Belgium and the National Credit Council in France.

In Belgium, for example, the commercial banks were first required, in 1946, to maintain, apart from cash reserves, minimum holdings of specified types and maturities of Government securities equal to varying percentages of their deposit liabilities, namely, from 50 to 65 per cent., depending upon the size of the bank and the types of deposits. These requirements were subsequently revised, but the broad principle was retained. In Italy, all banks were required, as from October, 1947, to hold a prescribed proportion of their total deposits in Government securities or in interest-bearing blocked accounts at the central bank or the Treasury. In France, moreover, the banks had, as from October, 1948, to keep their holdings of Government securities at a minimum of 95 per cent of the amount held at the end of September, 1948, and also to hold Government securities for at least 20 per cent. of all increases in their deposits after that date.

Subsequently, secondary reserve requirements of varying kinds and percentages were also imposed in Mexico, India, Sweden, Norway, Holland and the Philippines In Mexico, for example, where the commercial banks already had to maintain large reserve balances with the central bank, they were required, as from September, 1949, to hold a reserve of at least 100 per cent. in cash assets, Government securities or specified types of private

paper, against any net increase in their demand liabilities after that date.

In all these countries the principal motive underlying the introduction of supplementary reserve requirements was generally to restrict the capacity of the banks to expand private credit by limiting their ability to convert Government securities and surplus cash assets into business loans. In some countries it served as a valuable anti-inflationary measure and helped to make the discount-rate policy of the central bank more effective, but in others the net result was that it facilitated deficit financing by the Government. There is no doubt, however, that this new method can be made to play a valuable part in any positive disinflationary monetary policy under conditions of exceptional inflationary pressures caused by war, rearmament or other abnormal circumstances.

Changes in Margin Requirements on Security Loans. Under the Securities Exchange Act of 1934, the Federal Reserve System was given an instrument of selective credit control, designed specifically to assist it in controlling the volume of credit used for speculation in securities The Board of Governors was empowered to prescribe rules and regulations with respect to the amount of c[redacted]extended by banks against securities[1] registered on national securities exchanges for the purpose of carrying or trading in such securities, and with respect to margins for loans by brokers to their customers.

In 1936, the Board fixed a margin requirement of 55 per cent for loans by banks or brokers to their customers for the purchase of Stock Exchange securities; and in November, 1937, this margin was reduced to 40 per cent [2] of the current market value of the securities held as collateral, as a result of the slump in the market prices of securities. For the same reason it was decided to fix a margin requirement of 50 per cent. for short sales with a view to restraining the activities of bears.

After 1937, no change was made in margin requirements until February, 1945, when the requirement for purchases of securities was raised to 50 per cent. This action was probably intended as a warning against a panicky market, in view of the distinctly favourable turn in the war situation. In July, 1945, after the end of

[1] Provision was made for the exemption of certain securities, such as Government securities and bonds

[2] In the case of loans by banks to brokers and dealers in securities for the purpose of financing customers' commitments, and loans by brokers to other members, brokers and dealers, the margin requirement was reduced from the previous 40-per cent to 25 per cent.

hostilities in Europe, the margin for purchases as well as for short sales was raised to 75 per cent.; and later in the year it was further increased to 100 per cent.

In February, 1947, the margin was again lowered to 75 per cent., and in March, 1949, it was further reduced to 50 per cent. With a recurrence of inflationary and speculative activity, however, the margin was increased to 75 per cent. in January, 1951, but was again reduced to 50 per cent. in February, 1953.

The Board was further assisted in its task of controlling the use of credit for speculative purposes by a provision in the Banking Act of 1933, which prohibited member banks from acting as agents for companies and individuals in the making of loans on securities, the so-called 'loans for account of others', which constituted an important element in brokers' loans during the great Stock Exchange boom of 1928-29

In referring to the Board's power of adjusting margin requirements on security loans, Burgess[1] says that 'it is a form of control which is in some degree paternalistic and restrictive, but speculation in securities had proved itself so destructive of economic stability in this country that some vigorous form of control of this sort appeared to be necessary' According to Goldenweiser,[2] 'margin requirements have served a useful public purpose, and some light has been thrown upon their possibilities and their limitations as an instrument of policy'.

From the technical point of view, it is capable of being used as a prompt and effective method of restraining speculation in securities, but in practice it suffers from the same disadvantage as was mentioned in the case of the method of changes in reserve requirements, namely, that it throws an enormous responsibility on the central bank and will tend to cause the latter to be singled out, more than ever, for the role of arch-scapegoat. Burgess admits much of this, in connection with the method of adjusting margin requirements on security loans, when he says that 'the legislation has placed upon the Reserve System a responsibility which is likely to prove onerous, for the System will find itself at times required by circumstances to take action which will directly and immediately influence the profits and even solvency of considerable groups of people'.

Nevertheless, it must be appreciated that, as the United States have in the past been inflicted with speculative booms of greater

[1] Op cit, pp 263-4.
[2] *Banking Studies*, by Members of Staff of Board of Governors, p. 406.

frequency and intensity than any other country in the world, and as the Stock Exchange position has usually had strong reactions on general business activity, some method had to be devised in the United States for dealing with a phenomenon 'which had proved itself so destructive of economic stability'.

Regulation of Consumer Credit. Under an Executive Order issued by the President of the United States on 9th August, 1941, and authorising the Board of Governors to regulate the terms and conditions under which credit repayable in instalments may be extended for purchasing or carrying consumers' durable goods (other than a residential building in its entirety), the Federal Reserve System was given an additional instrument of credit control. As the Chairman of the Board said at the time: 'The purpose of instalment credit regulation is to help dampen the demand for goods the civilian supply of which has already been reduced and must be further reduced because of defence needs . . . Demand for these goods tends to cause inflationary price rises as well as to absorb materials increasingly needed for defence The regulation . . . is a supplemental instrument to be used in conjunction with the broader, more basic fiscal and other Governmental powers in combating inflation '

The initial regulation issued by the Board became effective on 1st September, 1941, and applied to automobiles, motor-cycles, aircraft, boats, refrigerators, washing machines, stoves, cleaners, sewing machines, radio sets, and musical instruments The original list of articles did not include some types of goods that are commonly bought on instalment credit, nor were restrictions imposed on all types of consumer credit

In May, 1942, the list of articles covered by the regulation was substantially broadened, and provision was made for stricter credit terms. Semi-durable goods for civilian consumption were included as well as durable goods, and the Board of Governors stated at the time that 'the revised regulation contemplates that the volume of outstanding consumer credit, already substantially reduced, will be further contracted in keeping with the Government's purpose to prevent the rapid bidding up of prices'[1]. The maximum permissible maturity of instalment sales was reduced to twelve months, and the required down payment for all listed articles was increased to $33\frac{1}{3}$ per cent, with some exceptions such as automobiles for which the previous maximum maturity of fifteen months was retained, and furniture and pianos for which

[1] *Federal Reserve Bulletin*, May, 1942, pp 399-400.

the required down payment was placed at 20 per cent

Although this instrument of credit control was introduced in the United States as a defence measure, and later extended as a war measure, it was continued after the war and regarded by the Board of Governors as a necessary means of selective control. Thus, in its Annual Report to Congress in June, 1946, the Board took the opportunity to express the opinion that 'from time to time . . . the expansion and subsequent contraction of consumer credit have gone so far as to accentuate the upswings and downswings of the business cycle', and that 'there is no way of preventing such excessive expansion and contraction except governmental regulation of the terms on which consumer credit shall be made available, such as the down payment required on instalment sales or financing and the length of time permissible for instalment contracts'.

In November, 1947, however, the Board's power to control consumer instalment credit was allowed by Congress to lapse. As a result of strong representations by the Board, this power was restored to it in August, 1948, but only for a short period, namely, to June 30, 1949. In September, 1950, the Board again assumed control over consumer credit under the authority granted to it by the Defence Production Act, which also empowered it to impose restrictions on credit for residential building. Subsequently the Board was likewise authorized to regulate certain other types of real estate credit. It decided, moreover, to make full use of these powers with the avowed object of lessening inflationary pressures and making labour and material available for the needs of the defence programme.

With the adoption of a tighter monetary policy and the lessening of inflationary pressures, the control over consumer credit was suspended in May, 1952, and that over real estate credit in September, 1952.

The control of consumer instalment credit was also adopted by several other countries where extensive use was made of such credit, and for the same reasons as in the United States. Thus, Canada revived its wartime control of instalment credit, and such countries as Great Britain, Australia, New Zealand and Belgium also imposed restrictions on hire-purchase financing. In Canada, however, it was suspended again in May, 1952, and also in Great Britain in May, 1954.

There is no doubt that in many countries consumer instalment credit has developed to such an extent as to exercise a substantial

influence on cyclical fluctuations in general economic activity, and that it has, therefore, become necessary at times to regulate, by direct as well as indirect means, the availability of credit to consumers as a whole.

Publicity. Publicity as an instrument of policy is used by a number and variety of central banks, which regularly publish weekly statements of their assets and liabilities, monthly reviews of credit and business conditions, and comprehensive annual reports on their own operations and activities, money-market and banking conditions generally, public finance, trade, industry, agriculture, etc.

Nowhere, however, has publicity been employed as extensively as in the United States, where the Board of Governors publishes, in addition to a weekly statement of the condition of the Federal Reserve System, a monthly bulletin on general business and credit conditions and each of the twelve Federal Reserve Banks publishes a monthly review of conditions in its own district. Furthermore, the Board issues a weekly report of the condition of member banks in the principal cities and of the volume of bank transactions in the principal centres of the United States; and at times the views of the officials of the Federal Reserve System on financial conditions have been expressed in the official publications of the System or in other ways.

It is difficult, on the whole, to judge of the efficacy of publicity as a method of control, for while some central banks seem to regard and treat it largely as a matter of duty and as a very minor instrument of policy if at all, there are others which place a great deal of value and importance on it. Burgess,[1] for example, holds that the statements of views of officials of the Federal Reserve System 'have sometimes constituted an instrument of policy fully as effective as specific action which might be taken', and that the availability of a wide range of information in the System's publications 'may well prove in the long run as important a factor making for financial stability as discount or open market policy'.

The Reichsbank also made extensive use of publicity. Dealing with the period from 1924 to 1933, Mildred Northrop[2] said that 'publicity at all times and at all places and in connection with every aspect of German economic life that the Bank considered vicious, unhealthy, or undesirable was resorted to without stint', and that attention was directed in particular to the danger of reckless

[1] Op cit, pp 257-8
[2] Op cit, pp 380-1

public spending, the essential poverty of Germany, and the economic use of foreign funds. It was added, however, that the Reichsbank 'was in no measure successful in checking or correcting these basic weaknesses'.

The Riksbank of Sweden has regularly given publicity to its monetary policy. According to Kjellström,[1] 'public announcement of its programme has been one of the techniques used by the Riksbank'. There is much to be said for his observations that 'publication of a definite monetary programme has the advantage of enabling the general public to anticipate future developments and to enter into future commitments with more confidence', and that 'if there is faith in the central bank, the announcement of a simple objective may cause the public to act in a manner that will help the programme to succeed'.

Owing to the increasing public interest and intervention in matters of monetary and banking policy, some publicity by the central bank appears to be essential. In general, it may be regarded as another instrument which is to be used with moderation and discretion.

[1] *Managed Money* (*the Experience of Sweden*), p. 6

CHAPTER XIV

EXCHANGE CONTROL

Introduction. As stated in Chapter VIII, the technical limitations of credit control as well as its restricted scope and range under modern economic and financial conditions have rendered it more and more necessary, in carrying out a given monetary policy, to employ other methods as supplements or temporary alternatives to whatever instruments of credit control a central bank may have at its command. The supplementary or alternative methods which have attracted most attention in recent years are the regulation of exchange rates and/or exchange restriction in one form or another; fiscal policy and compensatory Government action in respect of expenditure and taxation; and general control of investment. These methods will now be briefly discussed

Exchange Control. It was explained in Chapter V that since World War I, whatever monetary standards were in force, the central banks of most countries came, either as a natural development in monetary control or as an emergency measure, to play an increasingly important part in foreign exchange operations. Their foreign assets performed the functions of a 'buffer' or 'shock-absorber' and served as an instrument for the regulation of exchange rates, while their dealings in foreign exchange were also used as one of the means of regulating money-market conditions.

Thus, the old principle of the Bank of England[1] that participation in exchange transactions for its own account was not a proper sphere of activity for a central bank, and that the latter should exert its influence on exchange rates through its discount-rate policy, open-market operations in securities, etc., and also, under the gold standard, through its redeeming its notes in gold, was replaced in most countries by the central bank dealing in foreign exchange in order directly to regulate exchange rates, in

[1] Einzig says that the Bank of England kept aloof from intervention in the foreign exchange market until the early 'thirties, 'partly because it did not wish to compete with the merchant banks which were the principal dealers in foreign exchange and partly because it did not wish to interfere with the free working of the automatic system' (*The Banker*, July, 1944)

accordance with the prevailing monetary standard or policy, as well as for the purpose of regulating money-market conditions.[1] At the same time, the central bank sought to regulate money-market conditions also by means of the customary instruments of credit control, which would in turn help to influence the exchange rates in the desired direction, as the demand for and supply of foreign exchange are ordinarily determined in no small measure by the monetary and credit situation. It operated, therefore, on exchange rates both directly and indirectly, buying and selling foreign exchange and supplementing these direct operations by discount-rate action, open-market operations in securities, moral suasion, etc.

Direct participation in foreign exchange transactions was already being increasingly adopted by central banks during the 'twenties in connection with the gold or gold-exchange standard, particularly in those countries where money-market conditions were relatively unresponsive to the ordinary methods of credit control After the abandonment of the gold standard, however, it was employed on a much larger scale. Under the stress of the great depression, many central banks were granted wide powers for the purpose of acquiring foreign exchange and controlling the exchange markets of their countries In other cases, State exchange equalisation or stabilisation funds were brought into being or a system of general exchange control was introduced. In general, under the individual or regional managed currencies of the 'thirties, exchange-rate regulation came to be a more conscious and comprehensive instrument of economic or financial policy.

For example, when Sweden abandoned the gold standard on the 27th September, 1931 (i.e. six days after Great Britain), it was decided to follow a monetary policy aiming at the maintenance of the domestic purchasing power of the krona by means of adjustments in exchange rates as well as in interest rates. This involved active intervention by the Riksbank in the foreign exchange market with a view to regulating exchange rates Owing to the initial fear of an undue rise in prices and costs in Great Britain, the Riksbank did not let the krona depreciate as much as sterling in terms of gold. As compared with its former exchange parity of 18.16 per £ sterling, the krona was quoted at an average

[1] In this connection, purchases or sales of foreign exchange by the central bank have the same effect on the money market as purchases or sales of securities, but it should be borne in mind that the scope of the former operations is limited by the balance of payments position of a country

of 16.90 in October, 1931, and the Riksbank substantially raised its discount rate; but when it was seen that prices in Great Britain did not rise and even showed a tendency to decline further, the krona was depreciated to 18 in December of that year, while the discount rate was lowered.

In April and May, 1932, modifications in Swedish monetary policy were announced, namely, to the effect that henceforth the aim would be not only to prevent a further decline in world prices from depressing domestic prices, but even to raise the latter to a more appropriate level from the point of view of economic equilibrium. Thus, the krona-sterling rate which had been quoted at about 18 in the beginning of 1932, was maintained on an average at 19.50 in June-September, 1932; i.e. the krona depreciated even in relation to sterling. During that period the Riksbank bought foreign exchange freely in order to maintain such depreciation and as part of its policy to create easy money; and its discount rate was also lowered in several stages from 6 to 3½ per cent. In the meantime, it was further announced that monetary policy took other factors than changes in the domestic price level into account, and in particular the conditions affecting productivity and stocks of goods in the various branches of industry.

In July, 1933, after prices had shown a rise in Great Britain and the United States and these countries had adopted a deliberate policy of reflation, Sweden decided to abandon the policy of fluctuating exchange rates on London and to stabilise the krona-sterling rate at 19.50 as long as the monetary policy and economic conditions in Great Britain approximately suited Sweden. The rate was maintained at this level until sterling began to depreciate substantially in terms of the dollar and certain other currencies on the eve of the outbreak of war in Europe. The krona was then cut loose from sterling, and soon after it was decided to maintain a fixed rate of exchange with the dollar at 4.20 kronor (i.e 23.80 cents per krona), which also meant stabilisation with sterling at the new level of 16.90 as sterling was pegged at $4.03.

In one way or another, several of the smaller countries resorted to deliberate adjustments in exchange rates in the early 'thirties as the easiest means of counteracting the acute disequilibrium caused by the severe decline in world prices of primary products. In the case of New Zealand, for example, the depreciation of its currency to a discount of 25 per cent. in relation to sterling was, as Einzig[1] recorded, 'a deliberate reflationary move, since there

[1] *World Finance since* 1914, pp. 283-4

was no absolute necessity for devaluing the currency'[1] as in the case of Australia.[2] Denmark also deliberately depreciated its currency to a lower level than the former exchange parity with sterling, although Einzig considered that this 'reflationary move merely anticipated what would have happened spontaneously sooner or later' In the Union of South Africa, a reflationary adjustment was also reflected in the decision to return to parity with sterling after the gold standard was suspended at the end of 1932, since technically the currency could have been maintained at a higher level

Of the leading countries Great Britain, after a period of considerable fluctuations in sterling rates of exchange consequent upon the abandonment of the gold standard, adopted the policy of exercising a neutralising and stabilising effect on the exchange rates by means of an Exchange Equalisation Account which was established in April, 1932 This Account, which was managed by the Bank of England under the control and for account of the British Treasury, was not intended to aim at maintaining sterling at a fixed parity with gold or the dollar or any other currency, but was to be operated, in the first instance, for the purpose of counteracting temporary fluctuations in the exchange rates as a result of speculative exchange transactions and capital movements and allowing sterling to depreciate or appreciate only in accordance with the major movements in the net balance of payments The Account was also intended to neutralise the influence of capital and gold movements on the internal credit structure.

In order to achieve the first objective, the Equalisation Account bought gold and foreign exchange when Great Britain experienced a temporarily or artificially favourable turn in the balance of payments on account, for example, of an inflow of foreign capital, and sold gold and foreign exchange when there was a temporarily unfavourable balance of payments. With regard to the second

[1] On the 20th January, 1933, the Associated Banks of New Zealand released the statement that they had been reluctantly compelled by Government decision to raise the rate of exchange on London to £125 N Z per £100 sterling, and on the 27th of that month the Prime Minister stated in the House of Representatives that, 'after mature consideration the Government came to the conclusion that an increase in the rate of exchange from 110 to 125 would be more advantageous to the country as a whole than any other method in easing our present difficulties' (*Australasian Insurance and Banking Record*, February, 1933)

[2] In Australia, the situation was so critical at the time that the Government did not rely only on currency depreciation as a means of correcting the disequilibrium in the balance of payments, but resorted also to wage reductions, increased taxation and tariff restrictions.

objective, the Account sold Treasury bills (which it received from the British Treasury for this purpose), in the London money market in order to buy up any surplus gold and foreign exchange, thus withdrawing from the market the equivalent of the additional funds accruing from the inflow of capital; and it purchased Treasury bills whenever it had to sell gold and foreign exchange, thereby restoring to the market the funds lost as a result of the outflow of capital. By its operations, therefore, the Account served both to neutralise the effects of temporary or artificial movements in the balance of payments on the exchange rates and to insulate the internal credit structure from gold and capital movements.

The initial capital of the Equalisation Account, apart from the £25,000,000 balance of the old Dollar Exchange Reserve, consisted entirely of Treasury bills, and the amount of such bills provided for the purposes of the Account was increased from the original sum of £150,000,000 to £550,000,000 by 1937, owing to the considerable inflow of fugitive capital and gold. On several occasions, a part of the Account's increased holding of gold was transferred to the Bank of England in exchange for Treasury bills In February, 1939, however, gold to the amount of £200,000,000 was re-transferred from the Bank to the Account, because of the sustained heavy outflow of capital; and, at the outbreak of war, the remainder of the Bank's gold reserve was handed over in order to concentrate the nation's reserve in the Equalisation Account. This was accompanied by a comprehensive system of exchange restrictions under the Defence (Finance) Regulations.

Various countries followed the example of Great Britain and introduced stabilisation funds after they left the gold standard, e.g. United States, France, Holland, Belgium and Switzerland. These stabilisation funds were, however, different in some respects from the British Equalisation Account. The former commenced operations with gold and credit balances with their respective central banks, which were directly or indirectly derived from the appropriation of part of the profit on the revaluation of the gold reserves. Moreover, such funds were not used to any extent for the purpose of neutralising the effects of gold and capital movements on the internal credit structure.

The Stabilisation Fund of the United States, for example, amounted to $2,000,000,000, which consisted of $1,800,000,000 in gold and a credit balance of $200,000,000 with the Federal

Reserve Bank of New York. The Treasury did not, however, use the Stabilisation Fund regularly or on any extensive scale for the general stabilisation of dollar rates of exchange. Furthermore, it was only during one period (namely, from December, 1936, to April, 1938) that the Treasury attempted to counteract the influence of gold and capital movements on the internal credit structure by means of the so-called 'Inactive Gold Account', which bought gold with the proceeds of Treasury bills and thus sterilised such gold as in the case of the British Equalisation Account. In April, 1938, for reasons of monetary policy associated with the trade recession, it was decided to abolish the 'Inactive Gold Account' and desterilise all the gold held by that Account and amounting to $1,182,975,000 at the time; and all subsequent imports of gold were allowed to have their full effect on the internal credit situation.

From the beginning of 1934 the policy of the United States Treasury was, in the first instance, to maintain the dollar at a fixed gold parity (representing a devaluation of 40 9 per cent. as a reflationary measure), and to buy at the fixed price of $35 per fine ounce all gold offered to it. Except during the above-mentioned period, it paid for this gold with credit balances which it obtained at the Federal Reserve Banks from time to time in exchange for gold certificates. Thus, in spite of its huge favourable balance of payments on current as well as capital account during the period from 1934 to 1941, the United States, by means of the unlimited purchase of gold at a fixed price, succeeded in maintaining the devaluation and keeping the external value of the dollar at a lower level than it would otherwise have been.

During the 'thirties, other measures aiming at various forms and degrees of currency stabilisation were resorted to, e g. the development of currency areas (sterling area, dollar group, reichsmark area and yen area) with relatively stable exchange rates between the members of each such area; the tripartite monetary agreement between the United States, Great Britain and France established in September, 1936, and subsequently extended to apply also in a limited degree to Holland, Belgium and Switzerland; the adoption of clearing and payments agreements as a means of facilitating settlements between certain countries; the granting of stabilisation loans by the American Export-Import Bank and the United States Stabilisation Fund; and exchange restrictions over a large part of Central and Eastern Europe, Latin America and Asia.

Germany, for example, had established an elaborate system of exchange control by 1935. After the withdrawal of foreign short-term capital to the amount of 3,500,000,000 Rm. in July, 1931, and with a view to maintaining its exchange rates at the former gold parity of the Reichsmark, Germany first decided to prohibit the export of domestic capital and to demand that all foreign exchange accruing from the export of goods be handed over to the Reichsbank. To counter the further withdrawal of foreign capital, the so-called 'standstill' agreements were concluded with those foreign banks which still had large credits outstanding in Germany; but there were other foreign creditors to be reckoned with. One regulation after another was issued until in May, 1932, all payments to other countries were subject to official control. During the following two years further exchange restrictions were imposed, e.g on the export of foreign notes, coin and securities and on the transfer of interest, dividends and other current liabilities to foreign creditors. The substantial decline in Germany's exports, however, reduced the gold and exchange reserves of the Reichsbank to only 77,000,000 Rm. in 1934, as a result of which Germany concluded a whole series of clearing and payments agreements with other countries and established special institutions for the administration of such agreements and the control of exchange transactions generally. This was followed by control over its foreign trade as a whole, imports being limited more or less according to exports and exports being stimulated by all sorts of artificial measures.

In order to increase exports and other sources of foreign exchange and to reduce its liabilities to foreign creditors, special rates of exchange were quoted for such purposes with varying degrees of depreciation while the official rate was still maintained at the former gold parity. At the end of 1937, for example, the so-called Reisemark, Registermark, Kreditsperrmark and Effektensperrmark were quoted at 63.1, 53, 18.1 and 18 per cent. respectively of the gold parity of the Reichsmark.[1] Thus, the device of multiple currencies was adopted by Germany, along with exchange control and clearing and payments agreements, in its desperate efforts to balance its international accounts and to avoid general currency depreciation.

Several other countries also resorted, under the pressure of unfavourable balances of payments, to the practice of differential rates of exchange with varying degrees of exchange control. In

[1] Docker *Foreign Exchange*, p. 38.

some of the Latin-American countries, for example, there were substantial differences between the 'official' rates and the 'free' or 'black-market' rates of exchange, while adjustments in the official rates were made from time to time. In general, these countries were compelled to adopt exchange restrictions as well as adjustments in exchange rates, in their efforts to correct the acute disequilibrium in their balance of payments.

During World War II, general exchange control was necessarily adopted by the belligerent countries, in particular, for the purpose of checking the flight of capital, mobilising generally the exchange resources of the country and securing their application to the best national advantage, and preventing financial transactions of possible benefit to the enemy. The disruptions brought about by the war also necessitated control in neutral countries.

The finance regulations of, for example, Great Britain and other countries of the sterling area provided for strict Government control over all transactions in gold or in the currencies of countries outside the sterling area; for an embargo on the export of capital in any form to a country outside the sterling area, and on the export of gold, securities and foreign or domestic currency to any country except with the consent of the authorities concerned; for the mobilisation of foreign assets; and for control over imports and exports of goods in accordance with defined priorities, available shipping space, etc. More or less similar measures of control were applied in most other countries and resembled those which were evolved in Germany before the war.

At the end of the war there were many countries whose gold and exchange reserves had been considerably diminished and/or whose balance of payments position had been deranged by the war, and who, therefore, found it necessary to continue general exchange control as an indispensable instrument for securing approximate equilibrium in their balance of payments and preventing undue and uncontrolled depreciation of their currencies. There was also a likelihood that even many of the countries whose reserves had been substantially increased during the war, such as those of Latin America, neutral Europe, India, Egypt and South Africa, would be embarrassed by having to make up their heavy backlogs of consumer and producer goods at inflated prices and/or by having a large part of their reserves in sterling which would not be freely convertible into other currencies. For this reason, provision was made in the Monetary Fund Agreement for a transitional period during which member

countries could apply essential controls to current commercial and financial transactions as well as capital transfers.

As events turned out, most of the countries concerned did find it necessary or desirable to maintain exchange and import controls, and some even had to extend and tighten up their controls, particularly on account of a general dollar scarcity caused by both war and post-war disturbances in international economic relationships. Notwithstanding these controls, the disequilibrium suffered by a large part of the world with the dollar area became so serious by September, 1949, that 29 countries almost simultaneously devalued or depreciated their currencies in terms of the U.S. dollar.

The initiative was taken by Great Britain after securing the approval of the Monetary Fund for a devaluation of 30 5 per cent. Of the others, Australia, India, Union of South Africa, New Zealand, Ireland, Burma, Ceylon, Iraq and Iceland (i.e. the remainder of the sterling area except Pakistan) as well as Holland, Sweden, Norway, Denmark, Finland, Egypt, Greece, Bolivia, Israel and Jordan also devalued their currencies in approximately the same degree as in the case of sterling, while Belgium, Canada, France, Italy, Luxembourg, Portugal and Western Germany likewise adjusted their exchange rates with the U S. dollar, but only to the extent of from 10 to 20 per cent. France and Italy, for example, had already suffered a substantial depreciation of their currencies prior to September, 1949, and this was also the case with many Latin-American countries which had experienced a severe deterioration of their balance of payments after the war. Subsequent to that date some of these countries again made adjustments in their system of multiple exchange rates which resulted in a further net depreciation of their currencies in terms of the U.S. dollar. Canada, on the other hand, witnessed a steady appreciation of its currency after it decided to abandon its new par value in October, 1950, and to let its currency fluctuate in accordance with supply and demand.

As explained in the 1950 report of the Monetary Fund, the basic cause of the currency devaluations in September, 1949, by countries which 'accounted for approximately 65 per cent. of total world trade as measured by world imports in 1948', was 'the post-war distortion in international payments'. It was also admitted that the 'far-reaching changes in the world economy made readjustments of exchange rates inevitable', and that, 'in making the decision to devalue their currencies the members of

the Fund had it in mind to help to bring about a situation where a high level of trade could be maintained and a closer balance established in international payments with less reliance on restrictions and discriminations and less dependence on extraordinary foreign aid'.

Notwithstanding the widespread devaluation of currencies with the avowed object of correcting or lessening the disequilibrium in international payments, the present situation is that most countries still maintain various degrees of exchange restrictions with or without direct import controls. In fact, of those countries which exercised exchange restrictions in September, 1949, Canada is the only country which has abolished its system of general exchange control, namely, in December, 1951.

In due course, under the Monetary Fund Agreement, member countries are required to carry out the obligation of convertibility of their currencies into those of other members, at least for all current transactions, but they will remain free to exercise such control over capital transfers as they find to be necessary or desirable It must, however, be borne in mind that any limitation of exchange control to direct transfers of money capital would not be fully effective as a means of controlling capital movements. Capital can, for example, be exported in the form of commodities or securities or notes and coin, or by way of purchase from exporters of the proceeds of exports, or through transfer of funds falsely stated to be for the purpose of meeting current liabilities abroad This was found to be the case in all countries which tried at first to apply exchange control only to direct capital transfers. For those countries, therefore, which must continue to exercise strict control over the export of capital, it would appear to be necessary to maintain also some system of checking payments for imports or other current liabilities against bills of entry or other documents of proof, requiring the proceeds of exports to be accounted for, and controlling the export of foreign securities or domestic securities realisable abroad. If sufficient decentralisation and elasticity in administration are allowed for, such a system of exchange control would not obstruct the flow of trade and current transactions generally, and could thus not be regarded as in conflict with the provisions of the Fund Agreement.

In their desire to avoid any elaborate system of exchange control, some countries may, in view of adequate reserves, be content to exercise only direct control over transfers of money capital and to permit a leakage of capital through indirect channels;

and some may discard any notion of formal control over capital movements as a permanent measure. Whatever the normal policies of countries may be, it seems reasonably certain that repetition of the large and frequent transfers of 'hot money' during the inter-war period, with their disruptive effects on money and foreign-exchange markets, will not be tolerated in future.

Adjustment of Spot-Exchange Rates. As stated previously, adjustments of exchange rates or gold parities have, during the past twenty years, been deliberately made in many countries as a means of contributing towards the attainment of equilibrium in their balance of payments or general economic equilibrium. Although such adjustments during the 'thirties and again during the later 'forties, did have the effect of reducing disequilibrium and relieving the economic situation, with greater relief in some cases than in others depending upon circumstances, they did not by any means achieve all that was expected of them. The experience gained therefrom served at least to reveal the limitations of the belief that exchange rates can be adjusted to suit domestic economic and social policies, and that a rise in production costs in any country resulting from economic and social reforms can, without further repercussions, be offset by means of a suitable depreciation of the external value of its currency.

It can readily be admitted that, in certain circumstances, an adjustment of exchange rates may be essential to the attainment of economic and social equilibrium This does not, however, mean that, where a country has been forced to depreciate the exchange value of its currency, either because of unsound policies or natural misfortunes or dislocations caused by war or revolution, it can avoid having to readjust its policies and methods and to exert itself in order to avoid continuous depreciation and ultimate disaster. As Williams[1] points out, 'exchange-rate variation does not provide an escape from price adjustments but changes their impact'; and 'it becomes a question of how much of the adjustment is to be borne by the internal economy of a country and how much is to be forced upon others'.

The dangers and pitfalls of a policy of exchange-rate adjustments as a matter of deliberate and predetermined policy are at least on a par with those of customs-tariff adjustments, of which the world has had such a tragic experience that the need for drastic limitations thereof was emphasised in the Atlantic Charter. If one

[1]*Bretton Woods Agreements* (Proceedings of the Academy of Political Science Vol XXI, No 3, p 4)

country can adjust its exchange rates as a matter of convenience and relief, others can do so also; and this involves the danger of competitive currency depreciation with all its attendant disturbances and its injurious repercussions on international trade, investment, thrift, etc. Within any country, moreover, great danger will always attend a policy of aiming at economic and social reforms independently of its existing limitations as regards physical, human and capital resources, and then seeking to adjust the exchange value of its currency to the position which has been created by such reforms. There would then be no specific limit to the reforms which would be considered desirable and for which considerable pressure would be brought to bear upon the Government and Legislature.

In any case, it is obvious that, owing to the wide repercussions of their actions, the leading countries have little scope for advantageous adjustments in the relative values of their currencies. This applies not only to periodical changes as a means of mitigating cyclical fluctuations, but also to a long-run adjustment which can be accepted only as a matter of absolute necessity and as the most effective means of meeting a relative change in the economic situation which has resulted from a war or other big upheaval or from a natural shift in international trade.

With regard to the smaller countries, while theoretically there is much more scope for anti-cyclical or long-run adjustments of exchange rates, account has to be taken of certain practical limitations imposed by psychological reactions and technical disturbances. Plumptre,[1] for example, stated in 1939 that 'Australian economists (who have probably given the matter more attention than any other group) seem increasingly agreed that the exchange rate ought only to be moved under exceptional circumstances. Those of them who used to favour frequent movements as a means of ironing out relatively minor movements of business and export incomes now seem more impressed by the disturbances occasioned by alterations.'

Nurkse[2] holds that 'exchange-rate adjustments are appropriate mainly in cases of chronic or structural disequilibria in the balance of payments', and that 'as a remedy for such persistent strains, they can scarcely fail, given time, to produce the desired effect'. In his opinion, 'exchange adjustments for cyclical purposes are

[1] *Central Banking in the British Dominions*, p 389

[2] *Conditions of International Monetary Equilibrium* (Essay No. 4, published by International Finance Section of Princeton University), p. 10.

likely to be comparatively ineffective', because 'cyclical shifts in demand schedules may be so wide and violent that it is difficult, or even impossible, to determine precisely what alteration in exchange rates would secure balance-of-payments equilibrium in the short run'. Plumptre,[1] on the other hand, considers that the case for a variable exchange rate as an instrument for smoothing out cyclical fluctuations is, at least, basically true under favourable conditions. Thus, 'it is possible for depreciation to produce proportionately increased incomes for exporters if the demand for the commodities concerned is very elastic and if the amount of such commodities supplied by depreciating countries is not of sufficient importance to influence appreciably the price in markets abroad'. Otherwise, 'depreciation may lead competing sellers to rush in, hopeful of gaining from depreciation, and the activities of each will break down prices in foreign markets'. In short, everything depends on the circumstances of particular countries, and apart from conditions not always being technically favourable for advantageous adjustments, the ultimate domestic repercussions as well as reprisals by other countries must be taken into consideration.

Adjustment of Forward-Exchange Rates. Official intervention in the forward-exchange market has been undertaken by central banks on various occasions and in various ways. On the whole, however, central banks have been hesitant to participate actively in forward-exchange transactions In most cases, their participation has hitherto taken the form only of providing forward exchange in order to extend and improve the facilities available for covering importers and exporters against exchange risk, or to replace facilities that have disappeared as a result of exchange restrictions. At times, however, certain central banks or Treasuries have intervened deliberately and adjusted forward rates with the object of protecting the currency against bear speculation or attracting foreign short-term capital or discouraging the outflow of capital. In only a few cases have central banks followed a deliberate forward-rate policy for the systematic regulation of the international flow of funds.

Even under the gold standard, adjustments of forward-exchange rates were made by some central banks as a supplement to discount-rate policy for the purpose of influencing the movement of foreign balances in the desired direction and maintaining the spot-exchange rates within the gold points. Under an inconvertible

[1] Op. cit., pp 386 and 390

currency, however, 'the relative influence of forward rate as against bank rate as a factor influencing the movements of foreign balances increases considerably', and 'the more so since . . . forward rates are apt to become a multiple of the discrepancies between interest rates.'[1]

Einzig[2] gives various examples of official intervention in France, Italy, Great Britain and Holland, during the inter-war period, for the purpose of defending the national currency against speculative attack. Such defensive intervention took the form either of supporting forward rates at or above their interest parities, or of discouraging bear selling by making its cost prohibitive through artificial depreciation of forward rates well beneath their interest parities, or of prohibiting speculative operations in forward exchanges by law or moral suasion. These operations did 'not aim at influencing internal money rates or the movements of funds', but were 'merely tactical devices for the purpose of fighting bear speculation against the national currency'

He also gives illustrations of forward-rate adjustments, as an act of deliberate monetary policy, by the Austro-Hungarian Bank between 1907 and 1912, the National Bank of Austria in 1923-25, and the Bank of France in 1927-28 He shows, for example, how the Austro-Hungarian Bank, in 1906-7, successfully followed a forward-rate policy to restrain the outflow of foreign or domestic short-term funds, 'with the object of preventing an excessive external drain on its gold reserve, and thus of obviating the necessity for raising the Bank rate to a level at which it would unduly interfere with the stability of internal trade'; and how, in 1909, it adjusted its forward rates with the object, on the other hand, of discouraging an unwanted influx of funds.[3] The Bank of France also employed forward rates, in 1927-28, for the purpose of discouraging an inflow and, in particular, of encouraging an outflow of funds in order to reduce the volume of money and credit and prevent inflation. 'Thus, in order to make the transfer of funds to London and New York profitable, the Bank of France quoted swap rates to the French banks which left a reasonable margin of profit on the covered interest arbitrage. In other words, the Bank of France was prepared to buy forward dollars and sterling at an overvalued level compared with their Interest

[1] Einzig: *Foreign Balances*, p 115.
[2] *Theory of Forward Exchange*, pp 368-78
[3] Ibid, pp 329-49

Parities.'[1] In short, under circumstances of unwanted and disturbing movements of funds, certain central banks found it advantageous and useful to fix the forward rates at a level at which they were calculated to promote an inflow or outflow of short-term capital.

As far back as 1923, Keynes had advocated adjustments of forward rates in order to obviate the necessity of changing Bank rate for the purpose of counteracting unwanted tendencies in the international movement of funds He pointed out that, by varying the forward rates, central banks 'would be able, in effect, to vary the interest offered for *foreign* balances, as a policy distinct from whatever might be their bank-rate policy for the purpose of governing the interest obtainable on *home* balances'[2]. In subsequent writings, he further developed his plea for adjusting the forward rate as an alternative to raising Bank rate, in order to restrain an outflow or attract an inflow of capital, whenever the domestic economic situation would be detrimentally affected by higher money rates. He admitted, however, that such a device could be applied only against pressure due to causes other than an inherent weakness of the currency, and that it was not meant to combat either a fundamental disequilibrium or a genuine flight of capital. In short, the object would be 'to enable a central bank to protect the credit structure of its own country from the repercussions of purely temporary disturbances abroad, whilst the laws of long-period equilibrium would remain as before.'[3]

Einzig[4] drew particular attention to the close connection between forward rates and the international movements of funds, and forcibly advocated the more extensive adoption by monetary authorities of a forward-rate policy, not merely as a supplement to discount-rate policy but mainly as an independent instrument, for the purpose of regulating the international flow of short-term capital. He held that, 'with the aid of a forward-rate policy, it would be possible to minimise the disturbing effect of the movements of covered funds (i e. covered against exchange risk) in the foreign exchange market', and also 'to offset, in part, the disturbing effect of the movements of uncovered funds'; and that 'while a forward-rate policy can no more influence the movement of uncovered funds than a bank-rate policy can, it can give rise to transfers of covered balances in a direction opposite to the

[1] Ibid , pp. 350-9
[2] *Tract on Monetary Reform*, p. 135
[3] *Treatise on Money*, Vol II, p. 326
[4] *Foreign Balances*, pp 108-17

trend of uncovered balances' Although admitting that the large volume of 'hot money' which had intermittently to be contended with during the inter-war period, was as indifferent to forward exchange rates as to interest rates, he considered nevertheless that 'the volume of movements of foreign balances which can be brought about by means of manipulating forward rates is by no means negligible' and that 'there is no reason why the disturbing effect of foreign balances should not be minimised within the limits of possibility'.

The almost universal wartime control over exchange transactions served, of course, practically to eliminate the scope and need for a forward-rate policy as envisaged by Einzig; and, as shown previously, some form of control over capital transfers is likely to be maintained indefinitely in most cases. As long, however, as creditor countries like the United States do not formally restrict capital transfers, and Great Britain, for example, undertakes not to block the balances of such countries, there should, at least in the absence of fundamental disequilibrium, be scope for appropriate adjustments of forward rates as a means of influencing the flow of funds between, say, the United States and Great Britain and, in conjunction with the neutralising operations of the Exchange Equalisation Account, as an instrument for stabilising the British credit structure.[1]

[1] The combination of these two methods was, in act, adopted by the British authorities during the critical period 1938-39, when unfavourable developments in the international political situation rendered Great Britain subject to heavy withdrawals of foreign balances

CHAPTER XV

FISCAL POLICY AND COMPENSATORY GOVERNMENT ACTION—CONTROL OF INVESTMENT

Compensatory Government Action. As far back as 1909, Bowley had suggested to the Poor Law Commission of Great Britain that public works should be postponed during periods of active trade and industry with a view to their being put in hand as soon as a recession appeared, and in 1919, at the first International Labour Conference in Washington, a recommendation was adopted that each Member State should 'co-ordinate the execution of all work undertaken under public authority with a view to reserving such work as far as practicable for periods of unemployment'. Not much public attention, however, was given to this matter until the 'thirties, when several countries adopted it as part of their general financial policy and Keynes and other economists focused particular attention on public-works planning as a necessary supplement to monetary policy.

As stated in Chapter VIII, Keynes had, in his *Treatise on Money* (1930), stressed the factor of disequilibrium between saving and actual investment being the primary cause of cyclical fluctuations in business activity This method of analysis led him, in due course, to suggest that, in the absence of general control of investment, the business cycle should be controlled by adjusting the capital outlays of the State and public bodies generally according to the exigencies of the business situation. By retarding investments in times of active trade and speeding up investments in times of declining trade, public bodies could help to restore equilibrium between savings and investment; and it was naturally easier to confine this duty to the official bodies than to try to extend it over the entire sphere of production. As Keynes said, in 1937, 'the best we can hope to achieve is to use those kinds of investment which it is relatively easy to plan as a make-weight, bringing them in so as to preserve as much stability of aggregate investment as we can manage at the right and appropriate level'.[1]

[1] Article in London *Times*, January, 1937.

The public-works plan of combating business cycles was widely discussed during the years 1933-38 In 1935, Gayer's comprehensive treatise on *Public Works in Prosperity and Depression,* which was a revised version of his report submitted to the National Planning Board of the United States in the previous year and which dealt with the utilisation of public works as an agency of economic stabilisation, was published by the National Bureau of Economic Research. In 1937, Marriner Eccles[1] (Chairman of the Board of Governors of the Federal Reserve System) stated that 'the Government must be looked upon as a compensatory agency in this economy to do just the opposite to what private business and individuals do', since 'the latter are necessarily motivated by the desire for profit', while 'the former must be motivated by social obligation'; and that the Government should always 'be ready to incur a budgetary deficit' if spending the total revenue is not sufficient to meet the unemployment situation and stop credit contraction. In the same year, a group of economists of Oxford, including MacGregor, Salter, Cole and Henderson,[2] argued that public authorities as well as industry ought to have plans ready for important capital works in preparation for the following slump or recession; and Robbins[3] was also in favour of some planning of public works to smooth out the business cycle, as far as public works can be conveniently held up.

Moreover, the idea of a deliberate programme of public works and deficit financing as a means of counteracting unemployment and a decline in business activity was actually translated into practice in Sweden during the period 1930-35[4] and was held out in prospect for future recessions,[5] and, conversely, a policy of retarding public works and budgeting for a surplus in times of

[1] *American Bankers' Association Journal*, February, 1937

[2] Letter to London *Times*, June, 1937

[3] *Lloyds Bank Monthly Review*, May, 1937

[4] In July, 1933, new principles were applied 'Whereas before that date the aim of the unemployment policy had been to provide the greatest possible amount of employment, the intention now was, in addition to that, to produce the maximum effect in the way of stimulating production This was to be achieved partly by applying open-market wage rates and partly by financing the public works out of borrowings ' (Supplement to *Svenska Handelsbanken's Index*, June, 1938.)

[5] In June, 1938, owing to fear of a business recession developing in Sweden, an Enabling Act was rushed through the Riksdag, providing for an Emergency Budget of 250 million kronor for public works to be carried out in the event of depression

The Swedish Government also tried to extend this policy to the sphere of private industry by having a law passed which would tend to encourage industrial investment during periods of depression, by exempting companies from the income tax on such part of their net profits as could be shown to have been funded for depression investment purposes, subject to a limit of 10 per cent of annual profits or 2 per cent. of share capital for building investments and 20 per cent of profits or 4 per cent of capital for investment in accessories and inventory The funded money was to be

prosperity was enunciated. In the United States, a Public Works Administration and a National Planning Board were created in 1933; and, according to a statement made by the Secretary of the Treasury in November, 1937, the Government had, during the period 1933-37, 'deliberately used the unbalanced budget to meet a great emergency'. In Finland, a Budget Equalisation Fund was established in 1934 for the declared purpose of counteracting cyclical fluctuations in business activity. Budget surpluses were paid into this Fund and the proceeds invested in gold, foreign exchange and deposits with the central bank. In the beginning of 1938 Sweden also decided to set up a Budget Regulation Fund, to which the Minister of Finance proposed to transfer the estimated surplus of £1,000,000 for the year.

In Norway, public-works planning likewise attracted the attention of the authorities, for in the Annual Report of the Bank of Norway for 1936 the following statement occurred: 'It is to be wished that the works and the orders of the State and the Municipalities should not follow the fluctuations up and down of industry and trade, because in that case new difficulties will be added to those already existing. What is needed is, in other words, planning at long sight, so as to keep in reserve works that can be commenced when private business slackens.'

With regard to Great Britain, a circular was addressed by the Ministry of Health to Local Authorities in the beginning of 1938, emphasising not only that 'by an ordered planning of their prospective capital works on a basis which will admit of adjustment should circumstances make it desirable, Local Authorities can make a valuable contribution to the stabilisation of the conditions in industry over a considerable period', but also that 'the adoption of such a policy will enable them to take the fullest advantage, in the interests of their ratepayers, of periods when industrial resources are not unduly strained and conditions are therefore most favourable for the execution of necessary works'.

Furthermore, in its Report for 1937-38, the Board of Directors of the Commonwealth Bank of Australia expressed the opinion 'that expenditure on public works should be relatively low in times of prosperity and that plans should be ready for expansion in times of depression', because 'preparation of plans of useful public works, expenditure on which can be increased or decreased

used only in years fixed by the Government with a view to levelling out the trade cycle, and only for writing off buildings, machinery, &c, constructed during such years See London *Times*, 25th May, 1938

as circumstances require, would help in the timing and regulation of capital expenditure and contribute towards stability of employment'.

Since 1938 circumstances have led to even closer and wider attention being devoted to the theoretical aspects and practical application of expenditures on public works and deficit financing, and also of taxation, as instruments for supplementing monetary policy in the minimisation of cyclical fluctuations in business activity.

For example, after stating that 'in the majority of highly industrialised communities it is expenditure on private investment which is the most usual and most potent cause of instability in total expenditure, and consequently in employment', the British White Paper on Employment Policy (published in May, 1944), laid down *inter alia* the following as the guiding principles of the Government's policy in maintaining total expenditure: 'Everything possible must be done to limit dangerous swings in expenditure on private investment'; and 'public investment, both in timing and in volume, must be carefully planned to offset unavoidable fluctuations in private investment'. With this end in view, Government policy would also be directed to securing the co-operation of local authorities and public utility undertakings and 'to encouraging privately-owned enterprises to plan their own capital expenditure in conformity with a general stabilisation policy'. As regards public expenditure, 'the Government believe that in the past the power of public expenditure, skilfully applied, to check the onset of a depression has been underestimated'. With regard to the maintenance of the community's expenditure on consumption, the Government favoured the adoption 'of a scheme for varying, in sympathy with the state of employment, the weekly contribution to be paid by employers and employed under the proposed new system of social insurance'; and it had also examined 'a number of other devices for influencing the volume of consumption, such as the variation of rates of taxation and the incorporation of some system of deferred credits as a permanent feature of national taxation'. Reference was also made to the advantage of adopting, if found practicable, of a device similar to that of deferred tax credits and calculated to stimulate private capital expenditure at the onset of a depression.

According to the Canadian White Paper on Employment and Income (published in April, 1945), it was the 'firm intention of the

Government to institute a system of managing its capital expenditures so that they may contribute to the maximum to the improvement and stabilisation of employment and income'. The Government would aim at 'advance planning of all necessary and desirable Dominion projects so that there may be available a "shelf" of soundly planned projects, ready for execution when prospective employment conditions make it desirable to increase public investment expenditures', and also at encouraging advance planning on the part of the provincial and municipal governments and seeking their co-operation on the timing of such expenditures'. Moreover, the Government would be 'prepared in periods when unemployment threatens, to incur the deficits and increases in the national debt resulting from its employment and income policy, whether that policy in the circumstances is best applied through increased expenditures or reduced taxation'.

The Australian White Paper on Full Employment (published in May, 1945), also emphasised 'the part which public capital expenditure must play in maintaining full employment' and 'in stabilising the level of total expenditure' It stated that, should a decline in spending threaten to leave resources idle, the Commonwealth and State Governments and the local and semi-governmental authorities 'must be prepared to take advantage of the opportunity to employ those resources in accelerating and expanding their own programmes for national works, housing, improvement of capital equipment and provision of facilities for social and cultural activities'; and 'similarly, when private spending is tending to expand, some reduction may be made in public capital spending'

In South Africa the Social and Economic Planning Council, in a report on Taxation and Fiscal Policy submitted in 1945, recommended, *inter alia*, that 'governmental expenditure be increased during depression, as far as possible in such a way that it generates further increases in total expenditure'; that 'a system of anti-cyclical budgeting be adopted, whereby deficits are incurred during depression and surpluses collected during prosperity'; and that 'the income-tax be used, on expert advice, as an anti-cyclical instrument, the rates being if necessary lowered during depression and raised during an inflationary boom'.

In Sweden, the Ministry of Finance had an inventory drawn up by the local authorities throughout the country and by the State-owned economic undertakings, listing the various useful public works schemes that might be resorted to in order to provide

employment in a crisis In selecting the public works schemes, particular attention was to be paid to the ability of each project to contribute rapidly towards increasing the national income

In the United States, an Employment Act was passed in 1946, which declared it to be 'the continuing policy and responsibility of the Federal Government to use all practical means consistent with its needs and obligations and other essential considerations of national policy . . . to co-ordinate and utilize all its plans, functions and resources for the purpose of creating and maintaining . . . conditions under which there will be afforded useful employment opportunities, including self-employment, for those able, willing, and seeking to work, and to promote maximum employment, production and purchasing power'. The Act also required the President to transmit to Congress every year at the opening of the session, an economic report covering in substance all important phases of the nation's economic life, together with a programme of action, and it created a Council of Economic Advisers to assist the President in the formulation of his economic reports, as well as a Joint Committee of Congress to receive these reports and to make studies of its own.

After the war, moreover, several countries, such as Great Britain, the United States and Canada, generally aimed at budget surpluses, through relatively high taxes on personal and corporate incomes and on consumption, with the deliberate object of checking inflation. In 1951 Holland and Australia also adopted drastic fiscal measures for the same purpose. In Holland, for example, a fiscal programme was launched which aimed at an overall reduction in demand through a 5 per cent. cut in consumption, a 25 per cent. reduction in private investment and a substantial decrease in non-defence Government expenditure.

In Canada, moreover, the Government decided, in 1951, as a means of deterring non-essential business capital expenditures, to postpone for a period of four years the right to claim depreciation as a reduction of taxable income for certain types of new capital expenditure In Great Britain the existing high initial tax allowances for depreciation of newly-acquired fixed assets of business undertakings were also withdrawn in 1952. Sweden even resorted to an investment tax on all new expenditure by business undertakings on buildings and machinery in order to prevent excessive capital outlays. With the lessening of inflationary pressures, however, Canada and Great Britain restored the previous system of tax allowances for depreciation at the end

of 1952 and in April, 1953, respectively; and in April, 1954, Great Britain also introduced an 'investment allowance' of 20 per cent, in addition to the ordinary depreciation allowance, in respect of new industrial plant with a view to encouraging the modernization of industry

In one way or another, therefore, taxation has come to be adopted in various countries as an anti-cyclical instrument As the British Chancellor of the Exchequer said in his Budget Speech of March, 1952, about the role of taxation: 'Its job is not merely to balance the Government's expenditure It has a part to play in so regulating the purchasing power available to the community as a whole that this purchasing power does not outrun the amount of goods and services available'

In fact, fiscal policy had already attracted so much attention by 1941 that Williams[1] was induced to say that, 'while it grew out of monetary policy and was designed to supplement and strengthen it, fiscal policy has ended up by threatening to supplant monetary policy altogether' He holds that, properly managed, deficit financing and central bank policy 'could be mutually re-enforcing', and that 'in recovery from depression the deficits might play the larger rôle, both by creating new income directly and by helping to implement an easy money policy', while 'in a boom monetary policy could play an important and perhaps even the predominant rôle'. He stresses, however, the unfavourable implications of fiscal policy for monetary policy and the banking system if budgetary deficits are financed largely by the banks, and particularly if such deficit financing is continued for a long time. For example, the supply of money may be unduly increased by the banks' purchases of Government securities, and an excessive increase in their holdings of longer-term securities will make their financial position unstable, owing to possible changes in the prices of such securities, or will compel the central bank to support the Government-bond market. The need for such support will, in conjunction with the increase in the money supply, render monetary control difficult if not impossible. Thus, in order to keep the door open for the successful application of monetary control, where necessary, 'the real solution, and the only logical one, would be to finance deficit spending outside the banking system'.

Hansen[2] also emphasises that monetary policy must be supple-

[1] 'The Implications of Fiscal Policy for Monetary Policy and the Banking System' (reprint from *Proceedings of the American Economic Association*, December, 1941)

[2] *Fiscal Policy and Business Cycles*, pp 261-300.

mented by fiscal policy, and discusses cyclical fiscal policy under two headings, namely, a cyclically adjusted public spending programme and a cyclically administered tax policy. With regard to public spending, he distinguishes between 'pump-priming' and compensatory spending as an offset to fluctuations in private investment. The former 'carries with it the implication that a certain volume of public spending, varying under different conditions, will have the effect of setting the economy going on the way toward full utilisation of resources on its own power without further aid from governmental spending', while the latter 'connotes no implications with respect to setting the system going on its own momentum', but 'implies merely that public expenditures may be used to compensate for the decline in private investment'. Pump-priming expenditures, therefore, merely serve the purpose of an anti-cyclical instrument, whereas compensatory spending also covers long-run compensatory action which he considers essential to stability in a slowly expanding, mature economy. He points out that the amount of pump-priming or compensatory governmental expenditures required to achieve their respective objects depends upon the degree ('leverage co-efficient') in which particular types of expenditure increase national income and employment, i e. through their secondary effects upon consumption expenditures (on the 'multiplier' principle) and the induced effects upon private investment (on the 'acceleration' principle).

With regard to taxation as a cyclical compensatory measure, Hansen considers that 'for a dynamic, expanding economy enjoying vigorous booms a fluctuating consumption tax may be the appropriate tax policy'. He shows that 'taxes on pay-rolls and sales taxes can . . . very effectively be manipulated and timed according to the requirements of the cycle', in order 'to check an undue expansion of consumption in the boom and, through their removal together with the return of previously collected taxes, to stimulate consumption in the depression'. 'On the one side, this policy would tend to hold in check an abnormal rise in consumption and thus dampen the induced stimulus (via the Acceleration principle) to investment. On the other side, such a policy would provide funds for investment more largely from voluntary savings and thereby minimise the excesses of bank credit expansion'. As regards a less rapidly expanding, mature economy, 'a fixed but steeply progressive income-tax structure is indicated', since in such an economy the continuous stimulation of consumption expenditures is important and the cyclical fluctuations

of private investment could best be offset not by a tax programme, but by compensatory fluctuations in governmental expenditures.

Hansen distinguishes, therefore, between the cyclical aspects of compensatory fiscal policy and the need for long-run compensatory action in a mature economy, because in such a society 'private investment outlets are, on the whole, inadequate' and the problem is that of 'a long-run condition of chronic unemployment'.

In recent times, the recognition of a chronic tendency toward over-saving and under-investment in the less dynamic and more mature economies has been widely discussed and has raised the question of more or less permanent deficit financing, although in varying degrees depending upon the particular stage of the business cycle. Williams, however, forcibly points out the banking difficulties and the reduced scope for monetary control involved in deficit financing, with the aid of bank credit, as a long-run compensatory measure, and considers that such difficulties constitute an added reason for seeking correctives for secular defects in a mature economy in other directions, including taxation, and for using deficit spending primarily for business cycle changes.[1]

Hahn[2] also holds that governmental deficit spending, in con-conjunction with the lowering of interest rates, is 'defensible, even advisable' as a means of shortening the transition period from a cyclical depression to recovery, but that it cannot be used effectively for the purpose of compensating structural maladjustments. Thus, if measures are not taken to correct (i.e 'to adjust rather than compensate') structural maladjustments, government spending will have to go on indefinitely; and 'if government spending goes on indefinitely and therefore represents an ever-increasing burden on the community, the day must eventually come when it outlasts and outgrows the illusion effect, which is, by its very nature, transitory and limited'. In short, compensating reactions by the public will, in due course, neutralise the effects of compensatory spending by the Government.

While there is still substantial difference of opinion amongst economists regarding the merits of deficit financing as a means of long-run compensatory action, there is almost general agreement concerning the deliberate adoption of fiscal policy as an anti-cyclical instrument, both in respect of public spending and taxa-

[1] Op. cit , p 20.

[2] *Compensating Reactions to Compensatory Spending* (American Economic Review, March, 1945, pp. 28-39).

tion. Its limitations in practice should, however, be borne in mind.

As regards expenditure on public works and enterprises, for example, many of the activities of the Government and other public authorities are intimately connected with business movements and the increase or decrease in effective demand. While in a time of prosperity some of the construction projects may be held up, in anticipation of the following slump, without unduly hampering business activity, there are others which cannot be postponed for fear of congestion or inability to meet the legitimate requirements of business or other consumers. On the other hand, while some projects may be taken in hand during a depression in anticipation of an increased demand when business swings upwards again, there are others which it might be inadvisable to undertake in advance owing to new inventions being experimented with or to rapid improvements in methods and technique or to likely changes in the character and direction of demand.[1] The imperfect mobility of labour[2] is also a factor to be reckoned with. Moreover, in a democratic state it is not easy for the Government and other public authorities to maintain the appropriate policy for a dynamic economy, namely, deliberate budgeting for surpluses[3] and paying off debts in times of prosperity. At such times, the general public is infected with optimism and does not see the necessity for high taxation and redemption of public debt in anticipation of a slump for which they do not prepare themselves

While there are limits to the efficacy both of fiscal policy and of credit control as means of smoothing out the business cycle, it does not relieve public authorities and central banks of the duty and responsibility of exerting themselves to the utmost to achieve whatever they can in those directions, collectively and

[1] As Gayer said, 'a large proportion of public works is non-shiftable in time, and the problem is envisaged artificially if public bodies are thought normally to have unrestricted freedom of choice between different projects, none of them especially urgent'. He also emphasised that the argument in favour of public works as a stabilising agency is subject to the 'twofold proviso', namely, 'that the expansionist policy during depressions does not increase the difficulties of private industry, first, by raising the cost of new capital through injury done to the bond market and the banks in consequence of weakened confidence, and, second, by raising the cost of construction materials and building labor' (*Public Works in Prosperity and Depression*, pp 371 and 377)

[2] Nurske pointed out that an 'offsetting' policy 'cannot as a rule prevent booms and depressions in the export industries', and that 'just as a road-building programme, for example, owing to the imperfect mobility of labour, is not likely to remove all unemployment in, say, the textile industry, so a compensatory increase in domestic spending is not likely to be a complete remedy for depression in the export industries' (Op cit, p. 14)

[3] This applies particularly to countries where separate accounts are kept for the current and capital expenditures of the Government

individually. Even allowing for the limitations referred to, the combination of these two methods could be made to operate with great advantage to national and international economic welfare.

The importance of fiscal policy as a supplement to credit control by central banks is derived, in particular, from the fact that a business recession is accompanied by psychological factors which reduce the velocity of the monetary circulation and the willingness of entrepreneurs and investors to take risks. Experience has shown that under such circumstances central banks cannot 'pump out' much credit into active use merely by creating conditions of easy money. The credit base may at such times be increased by central banking operations without an increase in the effective demand for credit and for goods and services. It is then that spending by public authorities out of hoarded funds or borrowed money, provided the objects of expenditure have a reasonably sound basis and have been carefully planned beforehand to avoid wasteful expenditure, can be of great benefit in increasing the effective quantity of money flowing into active use.

Control of Investment. During the 'thirties, control of capital issues in one form or another was adopted by several countries as an emergency measure or an instrument of financial control; and, as in the case of exchange control, it was developed to the greatest extent in those countries where there was acute disequilibrium in the balance of payments and where totalitarian regimes had been established.[1]

In Germany, as stated in Chapter XIII, the rationing of credit as a method of control was abandoned after 1932, and direct control of the capital market was introduced Wagemann[2] pointed out that Germany's capital-market policy was directed, in the first instance, towards the consolidation of the large amount of public short-term debt issued during the depression, i.e. the conversion of the short-term debt into medium and long-term bonds so that they would be viewed mainly as capital investments. This consolidation, as well as the raising of additional money for Government purposes, was made possible by the radical restriction of private issues; and even such private issues as were permitted 'were connected with the financing of projects directly related to the development of national military needs and the Four Years Plan'. The restriction of issues thus became 'one of the most

[1] Soviet Russia had, of course, already implemented complete financial and physical controls during the 'twenties, as part and parcel of the authoritarian communist regime.

[2] *Wirthschaftspolitische Strategie*, pp. 323-6.

important methods of distributing capital in accordance with capital investment requirements'. In order to make the new loans attractive in comparison with already existing issues, the Law for the Investment of Surplus Dividends was passed, which practically restricted dividends paid out to 6 per cent. The decisive importance of this law, according to Wagemann, was that it prevented a large flow of money from the bond market to the stock market in the expectation of steadily increasing dividends, and that it promoted the issue of the large Government loans both through investment of surplus dividends and through making general stocks and shares relatively unattractive. Moreover, to prevent the flow of funds not only to the stock market but also to other bonds bearing higher interest, the great German bond conversion was carried out which reduced the nominal interest of all bonds to 4½ per cent. This conversion was applied also to private loans 'with the definite purpose of bringing about in a direct way a general reduction of the interest level', and, in particular, with a view to reducing the interest burden on business

As Wagemann said at the time (1937), 'the planned control of the capital market has naturally attained its greatest extent where the Government has taken over the economic leadership, thus especially in Germany and Italy'. In Great Britain, on the other hand, the control of capital issues during the 'thirties was mainly of a general regulatory nature and designed to obviate overlapping and congestion in the London capital market It was only in connection with the conversion of the £2,000,000,000 War Loan from a 5 to a 3½ per cent. basis, in 1932, that a complete ban was imposed on new domestic and foreign issues Thereafter, restrictions were maintained on foreign issues, with the assistance of a foreign investment advisory committee As regards domestic issues, a queue system for loans by local authorities was introduced On the whole, the regimentation of borrowing by British local authorities, and by the British Dominions and Colonies generally, became largely a matter of timing the respective issues At first, the main purpose of control of foreign loans was to protect sterling against pressure on account of an undue outflow of capital, but later the protection of domestic against foreign requirements of capital came to be an equally important factor While the regulation of capital issues facilitated the general lowering of interest rates and the conversion of Government loans, the primary stimulus for easy money was derived from the discount-rate policy and open-market operations of the Bank of England.

In Japan, when the so-called 'China Incident' was embarked upon, a capital adjustment law was introduced in September, 1937, the purpose of which was, according to the Vice-Governor of the Bank of Japan,[1] 'to facilitate the execution of the national policies by rendering smooth the supply of funds required for the equipment of industries which are essential and urgent in the present situation, and, at the same time, by preventing the locking up of capital in enterprises which are not urgent or essential'. Autonomous adjustment bodies were formed in accordance with the provisions of the law, and subject to the supervision of the Bank of Japan in order to prevent any flow of capital to speculative use.

During World War II, control of the capital market was obviously extended in belligerent countries as one of the means of mobilising resources for war purposes and applying them to the best national advantage In Great Britain, for example, war requirements constituted the sole criterion permitting new capital issues; and a Capital Issues Advisory Committee, including representatives of the Treasury and the Bank of England, was set up to ensure that this policy was carried out in the most effective manner. Control of capital issues was applied also to new bank advances and all mortgage loans in excess of £10,000 in any period of twelve months, as in the case of other issues In addition to such measures of financial control, physical controls were established to secure the efficient mobilisation and co-ordination of real resources for the maximum war effort

With the cessation of hostilities in Europe, control of capital issues in Great Britain was relaxed 'to meet the changed situation'. A Memorandum of Guidance was issued to the Capital Issues Committee (at the end of May, 1945), 'in order to set out the principles which will until further notice govern the grant of Treasury consent to new issues of capital'. In terms of this memorandum, which did not apply to the control of issues to be made by local authorities or of overseas issues, the primary object of the control was to ensure that, subject to the possibilities of the capital market and the circumstances, the order of priority of capital issues would be determined according to their relative importance in the general national interest, having regard, particularly, to current Government policy in respect of physical investment. It was provided that the Committee would give specially sympathetic consideration to (a) undertakings producing

[1] Article in Special Japan Supplement to ***Statist***, August 24th, 1940

or selling for export; (*b*) issues required to establish, restart, convert or expand undertakings in the areas designed as 'Development Areas' in furtherance of the policy of balanced distribution of industry; (*c*) undertakings which had been concentrated or requisitioned; and (*d*) undertakings which had suffered war damage Subject to circumstances requiring at any time a stricter control, consent would usually be given to issues of securities for the purposes of public utility undertakings and housing associations; the development of agricultural land and of the fishery industry; the production and exploitation of raw materials; transport and storage; and for such other productive and constructional purposes as might be notified to the Committee from time to time by the Treasury after consultation with the appropriate other Government Departments. In the case of public or private issues of £100,000 or more, however, it would still be necessary to arrange with the Bank of England (acting on behalf of and in consultation with the Treasury) as to *the time of making the issue.*

In 1946 legislation was passed in Great Britain in order to extend indefinitely the Government's wartime powers to regulate demands upon the supply of new capital. For the purpose of exercising these powers, the Capital Issues Committee was retained, and instructions were issued from time to time by the Treasury for the guidance of the Committee. In April, 1949, for example, the Committee was asked to consider four basic principles in deciding whether or not to give their approval to new capital issues, namely, the improvement of supplies of basic materials; the increase of exports to hard-currency markets; the saving of hard currencies; and the development of new techniques and of research contributing to industrial progress and the immediate reduction of manufacturing costs. In April, 1951, moreover, the Committee was instructed to give priority also to projects essential to the defence programme.

In all the other countries directly involved in World War II, general control of investment was, in one form or another, necessarily adopted as a war measure. The degree in which it was carried out during the war depended mainly on the magnitude of the war effort and the capital resources of the country concerned, as well as the general repercussions of the war on its economy. After the termination of hostilities,[1] some of these countries saw

[1] In the United States, for example, most of the controls were abolished almost immediately after the surrender of Japan, while the remaining control measures were to be withdrawn as soon as circumstances permitted.

their way clear to considerably relaxing physical and financial controls and retaining only certain general principles concerning control of capital issues

A tendency towards some control or direction of investment was also manifested in several neutral countries Under their totalitarian regimes and the pressure of circumstances, Spain and Portugal established economic councils and investment planning bodies. Amongst the democratic states, Sweden, for example, set up an Investment Council, consisting of representatives of the Government and industry, to study the trend of business activity and make recommendations to industry with a view to levelling out industrial investment activities as far as possible. Thus, while Sweden was, as explained in the preceding discussion of fiscal policy and compensatory Government action, committed to a policy of adjusting public investment to fluctuations in private investment, the Investment Council was to aim at minimising such fluctuations. Apart from the voluntary co-ordination of private capital expenditures, it was also to investigate other methods of evening out the flow of private investment, such as direct control of investment and flexible tax and interest policies

With regard to the future, the control of capital issues, like that of capital transfers, is likely to be retained in many countries in varying degrees as an instrument of general economic control and in conjunction with credit control The limitations of monetary policy under increased economic rigidity and complexity, and the prevailing conditions of severe economic disequilibrium over a large part of the world, have enhanced the need for some sort of investment planning or control to exercise a direct influence on financial activities which can only inadequately be covered by means of credit control. In many countries, circumstances may not actually warrant anything more than broad planning or direction of general investment by a representative advisory body, with such tangible support in the form of compensatory public expenditure and taxation as is found necessary at times to counteract substantial fluctuations in private investment. In some countries, however, conditions may necessitate a more direct and drastic control of investment.

In recent times, British economists have paid increasing attention to investment planning or control as a supplement or alternative to monetary policy, within the framework of a democratic society. In his *General Theory of Employment, Interest and Money*[1]

[1] Pages 378-81

(1936), Keynes submitted that 'a somewhat comprehensive socialisation of investment will prove the only means of securing an approximation to full employment, though this need not exclude all manner of compromises and of devices by which public authority will co-operate with private initiative'. He emphasised, however, that 'it is not the ownership of the instruments of production which it is important for the State to assume'; that 'apart from the necessity of central controls to bring about an adjustment between the propensity to consume and the inducement to invest, there is no more reason to socialise economic life than there was before'; that 'it is in determining the volume, not the direction, of actual employment that the existing system has broken down'; that 'the central controls necessary to ensure full employment will, of course, involve a large extension of the traditional functions of government', but that 'there will still remain a wide field for the exercise of private initiative and responsibility'; and that 'the authoritarian state systems of to-day seem to solve the problem of unemployment at the expense of efficiency and freedom'.

In his report on *Full Employment in a Free Society*[1] (1944), Beveridge recommended the establishment of a National Investment Board, which 'will have the powers of obtaining intelligence, of giving assistance and of regulating investment by public and private enterprise alike'. The Board is to 'exercise these powers in pursuance of a national plan prepared by itself and approved by Parliament'; and 'the investments undertaken by the Central Government, the local authorities, public utilities and private industry should be co-ordinated in accordance with the scale of priorities in a single national plan'. For the regulation and stabilisation of private investment, 'the Board should have some power, suitably safeguarded, of direct control of investment—that is to say power to stop or reduce by order a proposed private investment plan'; and 'if in any particular case private enterprise proves unwilling to embark on a major project that the Government considered to be necessary for the national interest, the State should undertake it under public auspices by providing the funds or, if necessary, being responsible for its execution'. Beveridge also advocated 'the extension of the public sector of industry so as to increase the scope of direct stabilisation of investment and to bring monopolies under public control'; and his 'long-term programme of planned outlay' included public

[1] Pages 177-78, and 272-73.

and private outlay on consumption, the organised mobility of labour, the controlled marketing of primary products, etc.

There is, however, considerable difference of opinion concerning the degree in which financial controls can be effective without physical controls, or the extent to which investment planning can be employed as an instrument of control without general economic planning and the restriction of individual freedom and private initiative.

Many hold the view that, if physical controls are absent or inadequate, financial controls will not achieve justice and perfection. As the *Economist*[1] said: 'If the job (of planned investment) is to be done at all, it must be done by controls of real resources. If these are effective, financial control of the new issues type will have no priority function to perform. . . . If, on the other hand, physical controls cannot be made effective in peacetime—either because the administrative machine cannot cope with them or the public will not stand for them—a financial priority control will be a very indifferent substitute. It would stop some non-priority borrowers at the main entrance, but non-priority industries with cash in their pockets would be scrambling through the gaping hole in the hedge at the back.'

Comprehensive physical controls, however, imply intensive economic planning and regimentation, which constitute a logical concomitant of the situation in an authoritarian regime but cannot be reconciled with basic conditions in a democratic economy. Some hold that a democratic framework nevertheless affords sufficient scope for broad planning and direction by the State in combination with private enterprise, while others claim that the two are incompatible. Aldrich,[2] for example, emphasises that there is a limit to the adaptability of democracy, and maintains that 'a democratically planned economy is an impossibility' and that 'free enterprise and democracy must fall together, as they arose together'. Hawtrey,[3] moreover, says that 'a division of function, attributing to the Government the selection of the profit-making enterprises to be undertaken and to the traders the business of running them is surely inconceivable', and that this can only be 'a half-way house on the road to collectivism'.

Under the prevailing conditions in many countries, however, there appears to be no clear choice between a 'planned economy'

[1] 25th August, 1945

[2] *The Incompatibility of Democracy and a 'Planned' Economy* (reprint of a lecture in 1939), pp 5 and 19

[3] *Economic Destiny*, p 289

and 'free enterprise'. The problem of post-war democracy seems inevitably to be that of combining a minimum of central planning and investment control with private initiative and enterprise in order to obtain the advantages of both and, in conjunction with monetary and fiscal policy, to maintain as high and stable a level of economic activity and employment as possible. The real difficulty is that too much State direction and intervention will hamper private enterprise, while too little will leave a gap; and each country has to determine what, in its circumstances, constitutes the happy medium. Economic planning certainly has its limitations and dangers in a democratic society, but the need for some form of general control of investment to supplement monetary and fiscal policy, in the task of minimising cyclical fluctuations in economic activity, demands at least that its possibilities be given a practical test.

CHAPTER XVI

THE RECENT REVIVAL OF MONETARY POLICY

General Review. After the abandonment of the gold standard, and also as an almost inevitable outcome of the Great Depression of 1930-33, there had been a pronounced tendency over a large part of the world to exercise monetary policy only in the direction of maintaining relatively cheap and abundant money as a reflationary measure, and both the official discount rate and the open-market operations of the central banks, as well as the liberalization of the reserve requirements in many countries, had been employed to that end. Then came the Second World War and the obvious temptation to use cheap money, with the aid of bank credit, as an economical and easy means of financing the war. Accordingly, whenever it was considered necessary or desirable during the War to introduce measures for the purpose of restraining inflation and directing resources into the most essential channels, these did not take the form of orthodox monetary controls but rather of such instruments as higher taxation on incomes and consumption; the reduction of consumption through consumer-credit control or rationing, or the establishment of other controls such as price and rent controls, exchange and import controls, investment control, allocation of labour and materials, etc.

In most countries the maintenance of cheap money, with primary reliance on non-monetary controls, was continued in the post-war period, whether regarded as a necessary element of post-war reconstruction or reconversion, or of a long-term policy of full employment and social security.

Thus, notwithstanding the virulent nature of the inflationary conditions and tendencies prevailing at the end of 1946 and the generally admitted necessity for drastic anti-inflationary measures, there was at that stage still an almost universal unwillingness to discard cheap-money policies and to re-employ the discount rate as an antidote. In fact, prior to 1949, the discount rate of the central bank was used as a deliberate and positive instrument

of credit control only in Belgium, Italy, Western Germany, France, Finland, Greece and Ecuador. In Belgium the rate was raised from $1\frac{1}{2}$ to $2\frac{1}{2}$ per cent. in November, 1946, to 3 per cent. in December, 1946, and to $3\frac{1}{2}$ per cent. in August, 1947; in Italy from 4 to $5\frac{1}{2}$ per cent. in September, 1947; in France from $1\frac{3}{4}$ to $2\frac{1}{2}$ per cent. in October, 1947, and to $3\frac{1}{2}$ per cent in September, 1948, before being reduced to 3 per cent in the following month; and in Western Germany from $3\frac{1}{2}$ to 5 per cent. in 1948. In Finland, Ecuador and Greece, the rates were as high as $7\frac{1}{4}$, 10 and 12 per cent., respectively, in 1948. In the United States, the discount rates of the Federal Reserve Banks were also raised from 1 to $1\frac{1}{2}$ per cent. during 1948, but at that stage there was still no follow-through policy.

In Belgium, Italy and France, on the other hand, the raising of the discount rate was accompanied or followed by the introduction of minimum secondary reserve requirements for commercial banks as a means of restricting their capacity to extend credit for general business purposes, by preventing or restraining them from selling Government securities. In Italy and France, the monetary authorities also exercised their powers of direct control over bank advances, as in Western Germany where, in addition, the central banking system used its power to raise the cash reserve requirements for the commercial banks as an instrument of quantitative credit control In all these countries the additional measures which were adopted helped to increase the effectiveness of the discount-rate policy in both degree and extent, at least in so far as the private sector of the economy was concerned. Unfortunately, this result was partly or wholly offset by the fact that, in some of the countries concerned, the Government still required extensive credit facilities from the central bank and the commercial banks

The other democratic countries, however, continued to try to avoid the orthodox use of the discount rate and of open-market operations as weapons with which to combat inflation. Apart from the fact that some of them, like Great Britain, Canada and South Africa, allowed their long-term interest rates to rise, while maintaining low short-term rates, and that short-term rates and the reserve requirements for member banks were raised to some extent in the United States, while long-term rates were pegged at a relatively low level, the only form of monetary control resorted to, if at all, by these countries, prior to 1949-51, was an effort to restrict bank credit by direct intervention, whether

under statutory powers or by means of moral suasion and voluntary arrangements with the commercial banks. The Federal Reserve System of the United States, the Bank of Canada and the South African Reserve Bank, for example, had no statutory power to issue general directives to the commercial banks concerning their lending and investment operations but on several occasions sought to enlist their co-operation in carrying out what appeared to be the appropriate credit policy in the circumstances of their respective countries.

After September, 1949, the inflationary effects of devaluation in the countries concerned and, subsequently, of the Korean war, made more and more countries realize that a general rise in money rates, with its direct and indirect effects on both the supply of and the demand for credit, was essential to reinforce the restriction of credit by regulation or moral suasion. Thus, in October, 1949, the South African Reserve Bank raised its discount rate from 3 to 3½ per cent, while soon after the outbreak of the Korean war a series of increases in official discount rates was started in various parts of the world. In Denmark the rate was raised from 3½ to 4½ per cent in July, 1950, and further to 5 per cent. in November, 1950; in the United States from 1½ to 1¾ per cent in August, 1950, in Belgium from 3¼ to 3¾ per cent.[1] in September, 1950, in Holland from 2½ to 3 per cent in September, 1950, and to 4 per cent in April, 1951; in Canada from 1½ to 2 per cent. and in Western Germany from 4 to 6 per cent., in October, 1950; in Finland from 5¾ to 7¾ per cent. in November, 1950; in Sweden from 2½ to 3 per cent. in December, 1950; in Great Britain from 2 to 2½ per cent., in France from 3 to 4 per cent. and in India from 3 to 3½ per cent. in November, 1951; again in Great Britain from 2½ to 4 per cent., and in the Union of South Africa from 3½ to 4 per cent in March, 1952; and again in the United States from 1¾ to 2 per cent. in January, 1953. In addition, rates were raised in Japan, Austria, Ceylon, Chile, Bolivia, and Costa Rica, and finally, in April, 1954, in New Zealand.

The raising of the discount rate in these countries was necessarily accompanied by other monetary control measures. Thus, secondary reserve requirements of varying types and degrees were also imposed in India, Sweden and Holland, as well as in Mexico, Norway and the Philippines, while the quantitative and qualitative

[1] The discount rate of the National Bank of Belgium had in the meantime been lowered from the high level of 3½ per cent, established in August, 1947, to 3¼ per cent in October, 1949, due to some recession of economic activity

control of commercial bank credit, and sometimes also of other forms of credit, was applied in various ways and degrees in such countries as the United States, Great Britain, Canada, Holland, Sweden, Norway, Australia, New Zealand and the Union of South Africa. Furthermore, the open-market operations of central banks in many countries were directed towards making the rise in the discount rate more effective. For example, countries like the United States, Sweden and Norway, which had adhered to a more or less rigid pegging of interest rates for long-term Government securities, with the aid of central bank support, at last decided to abandon their inflexible cheap-money policies and allowed gilt-edged rates generally to rise, while in countries like Great Britain, Canada, Holland and the Union of South Africa, where long-term interest rates had already been raised prior to 1950, a further rise was permitted to take place concurrently with the raising of the discount and other short-term rates.

In due course, however, most of the countries mentioned above found it possible to lower their discount rates either substantially or only in a relatively moderate degree, depending upon the prevailing circumstances. In Belgium, for example, the rate was lowered, as early as July, 1951, from 3¾ to 3½ per cent, and in September, 1951, to 3¼ per cent., as 'certain consumer goods industries had to face a marked slackening of the internal demand', while in December, 1952, it was further reduced to 3 per cent. In Finland the rate was also lowered from 7¾ to 5¾ per cent. at the end of 1951; in Holland from 4 to 3½ per cent. in January, 1952, 'because of the satisfactory reactions to the monetary and fiscal measures which had been applied during 1951', and subsequently to 3 per cent. in August, 1952, and 2½ per cent. in April, 1953; and in Western Germany from 6 to 5 per cent. in May and 4½ per cent. in August, 1952, and to 3½ per cent. by June, 1953.

In September, 1953, the rates were reduced in several other countries, namely, from 4 to 3½ per cent. in Great Britain and France, from 5 to 4½ per cent. in Denmark and from 6 to 5 per cent. in Austria. This was followed by a further lowering of the rate in Belgium from 3 to 2¾ per cent. in October, and by a similar reduction in Sweden in November, 1953. In February, 1954, moreover, the rate in France was reduced by a further ¼ per cent, while the Federal Reserve Banks of the United States also lowered their rate from 2 to 1¾ per cent. In April, 1954, the latter again reduced their rate, namely, to 1½ per cent., and in the following month the Bank of England likewise lowered its rate for the

second time, namely, to 3 per cent. In May, 1954, the rate in Western Germany was also once more reduced by ½ per cent., while that in Austria was again lowered by ½ per cent. in June, 1954, followed by decreases of ½ and ¼ per cent. in the rates in Ceylon and Spain respectively. On the other hand, the National Bank of Denmark raised its rate from 4½ to 5½ per cent in June, 1954, while countries like the Union of South Africa, Japan, Greece and Ecuador decided to maintain their higher rates for the time being.

This brief review is sufficient to illustrate the current trend towards a reorientation of monetary policy. In view, however, of the preponderant international economic importance of the United States and Great Britain, the course of monetary events in these countries deserves closer analysis. Developments in both countries were somewhat similar in the sense that, until recently, they relied primarily on fiscal and other non-monetary measures, and that socio-economic and political considerations played a major part in delaying the application of monetary controls.

United States. In the United States, the rôle to be played by monetary policy in the inflationary situation which continued to prevail after the War, was a subject of lengthy controversy between the Treasury and the Federal Reserve System. In short, the former desired the maintenance of cheap money not only on account of the huge increase in the Federal debt and the need to maintain confidence in the credit of the Government, but also with a view to ensuring the continuance of full employment, whereas the latter contended that, although it was necessary in the circumstances to avoid sharp and drastic rises in interest rates, some flexibility in credit policies and conditions was essential, in conjunction with fiscal and other measures, to counteract any unsound development in the general economic situation.

The first break with the cheap-money policy occurred in July, 1947, when the Federal Reserve System withdrew its fixed buying rate for Treasury bills, as a result of which the rate for such bills rose from ⅜ to almost 1 per cent. by January, 1948. This was followed by an increase in the System's buying rate for bankers' acceptances and by a more or less corresponding rise in short-term rates generally. In December, 1947, the System also slightly lowered its support prices for Government bonds from their previous abnormally high levels.

On the other hand, the power to control consumer-instalment credit which the Federal Reserve System had exercised as a

'supplemental instrument' of selective credit control since 1941, was allowed by Congress to lapse in November, 1947. Simultaneously, the Board of Governors of the Federal Reserve System decided to resort to moral suasion and, in conjunction with the Comptroller of the Currency, the Federal Deposit Insurance Corporation and the National Association of Supervisors of State Banks, issued a statement in which an appeal was made to banks to exercise extreme caution in their lending policies. This was followed up, in January, 1948, by a voluntary anti-inflation programme announced by the American Bankers Association, which aimed at the avoidance of loans for speculative inventory purchases and of mortgage loans for non-essential purposes, and priority for loans to finance essential supplies and services During the same month, moreover, the discount rate of the Federal Reserve Banks was raised from 1 to $1\frac{1}{4}$ per cent. to discourage member-bank borrowing Subsequently, the Board of Governors also raised the reserve requirement in respect of the demand deposits of member banks in the central reserve cities, namely, New York and Chicago.

Furthermore, in a formal statement before the Joint Congressional Committee on the Economic Report, in April, 1948, the Board specifically asked for the following additional powers: firstly, the power to require not only member banks but also all other commercial banks to keep primary reserves (i.e. credit balances) with the Federal Reserve Banks in their respective areas up to 10 per cent of their demand deposits and 4 per cent. of their time deposits, in addition to the exisiting reserve requirements; secondly, the authority to impose secondary reserve requirements on all banks, in the form of minimum holdings of specified cash assets or short-term Government securities, up to 25 per cent of their demand deposits and 10 per cent. of their time deposits, if the banks continued to expand credit for the private sector by selling Government securities; and thirdly, the power to reimpose the regulation of consumer-instalment credit.

The only steps taken towards implementing these proposals, however, were to raise the maximum limits of the reserve requirements which the System could impose on *member* banks, by 4 per cent. in the case of demand deposits and $1\frac{1}{2}$ per cent. in the case of time deposits, and to restore to the System the power of consumer-instalment credit control. These powers were granted by Congress in August, 1948, for only a short period, namely, to June 30, 1949.

In August, 1948, moreover, a further small upward adjustment of short-term rates was achieved concurrently with the raising of the discount rate of the Federal Reserve Banks from 1¼ to 1½ per cent. The Board of Governors also decided to exercise its temporary additional powers to raise the reserve requirements for member banks beyond the previous maximum limits, at least in so far as the demand deposits of reserve city and country banks and the time deposits of all member banks were concerned, and to reimpose restrictions on consumer-instalment credit, with effect from September, 1948.

In spite of these measures, however, the general monetary position remained unsatisfactory due to the fact that the Federal Reserve System considered itself obliged, as an essential part of the Government's monetary and debt-management policies, to continue to support long-term Government bonds, and, in particular, to maintain the 2½ per cent. bonds at not less than par. This meant that it had to take up any excessive offerings of Government bonds in the market by banks, insurance companies or other financial institutions, and that it could not, therefore, exercise effective control over the cost and availability of credit. Thus, the System's total holdings of Government securities increased by 2 billion dollars between June and December, 1948, notwithstanding a substantial reduction in its holdings of short-term securities as a result, *inter alia*, of the use of surplus Treasury funds for the retirement of floating debt. In short, although the raising of the reserve requirements for member banks served to reduce their 'free' cash reserves, the net creation of Federal Reserve credit, through the System's increased holdings of Government securities, again had the effect of providing them with surplus cash.

In 1949 the monetary controversy apparently subsided, due, no doubt, to a recession in business activity and in inflationary pressures generally, which induced the System to lower the reserve requirements for member banks, in stages, by 4 and 2½ per cent. in the case of demand and time deposits respectively. It was also able to reduce its holdings of Government securities by 4½ billion dollars during the year as a whole. Nevertheless, it continued to plead for wider powers to be available for use in the event of a recurrence of inflationary pressures. But notwithstanding this, Congress allowed the above mentioned additional powers to lapse in the middle of 1949.

The controversy flared up again in 1950 when the inflationary

trend was renewed, particularly after the outbreak of the Korean war and the consequent adoption of extensive rearmament and stockpiling programmes by the United States. There was evidence of considerable disagreement in August, 1950, when the discount rates of the Federal Reserve Banks were raised to $1\frac{3}{4}$ per cent. in order 'to discourage unnecessary borrowing by member banks and to indicate, by use of this traditional instrument of central bank policy, that restraint in the extension of credit was necessary'. At the same time the Federal Reserve System directed its open-market activities towards bringing about 'a moderate rise in interest rates, especially in the short-term sector', and again appealed to banks and other lenders for voluntary restraint in credit extension. Furthermore, in September, 1950, it utilized the powers which had lapsed in 1949 but were restored to it under the new Defence Production Act, to restrain consumer-instalment credit, and soon after exercised its additional power to impose restrictions on credit for residential as well as commercial building. Subsequently, it also decided to raise member bank reserve requirements which, as stated previously, had been reduced during 1949, to take effect in January and early February, 1951, and likewise to increase the margin requirements on stock exchange loans from 50 to 75 per cent. with effect from January, 1951.

These measures were, however, regarded by the Federal Reserve System as inadequate so long as it was obliged to buy Government bonds, particularly from the banks, in order to maintain market yields within fixed limits It was not until early March, 1951, that a 'full accord' was finally reached between the System and the Treasury 'with respect to the debt management and monetary policies to be pursued in furthering their common purposes, to assure the successful financing of the Government's requirements and at the same time to minimize the monetization of the public debt'.

Under this accord, for example, a new series of non-marketable long-term bonds, bearing an interest rate of $2\frac{3}{4}$ per cent., was offered in exchange for the outstanding $2\frac{1}{2}$ per cent. bonds of a total amount of almost \$20,000,000,000. The offer, which was made 'for the purpose of encouraging long-term investors to retain their holdings of Government securities', was favourably received in the circumstances, more than two-thirds of the latter being converted into the non-negotiable bonds which could, however, in due course be exchanged for marketable short-term Treasury

notes. Thereupon the Federal Reserve System withdrew its support of a rigid pattern of rates for Government bonds, and the immediate result was a moderate decline in Government and other gilt-edged securities Soon after it was explained that, while the System did not intend to support prices of Government bonds on 'a pin-point peg', it would not let the market go completely on its own without regard to orderly conditions. In short, it was mainly a question of a return to orderly flexibility in the gilt-edged market, the actual pattern of rates at any time to depend upon the relation between supply and demand and the current economic situation.

In March, 1951, a Voluntary Credit Restraint Programme was launched under the Defence Production Act, with the co-operation of the commercial banks, insurance companies, investment banks and savings banks. Apart from the more positive and direct appeal and the more extensive scope of the new programme of credit restriction, its effectiveness was enhanced by the change in official monetary policy and method referred to above.

After March, 1951, short-term market rates and bond yields continued to show a rising tendency, Thus, the Treasury bill rate rose from an average of 1.42 per cent in March to 1.73 per cent. in December, 1951, and 2.13 per cent in December, 1952, and the yield on long-term Government bonds from 2.47 to 2.70 and 2.75 per cent respectively. The commercial banks also raised their interest rates. The leading New York banks, for example, raised their rates on prime commercial loans from $2\frac{1}{4}$ to 3 per cent, in three stages during the course of 1951

In view, however, of the rising trend of money rates and the easing of inflationary pressures, it was decided in May, 1952, to suspend not only the voluntary credit restraint programme but also the restrictions on consumer instalment credit, and subsequently those on real estate credit as well

Finally, in January, 1953, the discount rates of the Federal Reserve Banks were raised from $1\frac{3}{4}$ to 2 per cent. in order not only to bring these rates into better alignment with open-market money rates but also to restrain credit expansion. This was followed, in due course, by a further increase of $\frac{1}{4}$ per cent in the rate of the New York banks for prime loans, and of about $\frac{1}{2}$ per cent. in the yield on long-term Government bonds

As a result, however, of the emergence of a relatively severe monetary stringency, and 'in pursuance of a Federal Reserve policy designed to make available the reserve funds necessary to meet the essential needs of the economy and to help maintain

stability of the dollar', the Federal Reserve System decided, as from July, 1953, to make a small reduction in the reserve requirements for member banks in respect of their demand deposits and also relieved the tight-money situation by adding $2,000,000,000 to its holdings of Government securities between May and December, 1953. The result was that during this period the Treasury bill rate dropped from $2\frac{1}{4}$ to $1\frac{1}{2}$ per cent, and the market yield on long-term Government bonds from 3.09 to 2.79 per cent After a still further decline in market rates and presumably also in view of a moderate recession in economic activity, the Federal Reserve Banks decided, in February, 1954, to lower their discount rate from 2 to $1\frac{3}{4}$ per cent., and again in April, 1954, to $1\frac{1}{2}$ per cent. This was followed in June–July, 1954, by a further reduction in the reserve requirements for member banks

Great Britain. In Great Britain, the cheap-money policy which had succeeded in maintaining the wartime levels of short and long-term rates for Government securities at or near 1 and 3 per cent respectively, was intensified after the end of the war, resulting in a rate of $\frac{1}{2}$ per cent for Treasury bills by the end of 1945 and a $2\frac{1}{2}$ per cent. level for long-term Government stocks during the course of 1946.

The first departure from the ultra cheap-money policy occurred in 1947 when the long-term rate was allowed to rise to 3 per cent. and, by the end of 1949, to $3\frac{1}{2}$ per cent., which was more or less maintained during 1950. The Treasury bill rate, however, was kept unchanged, with central bank support where necessary, at the artificially low rate of $\frac{1}{2}$ per cent., which meant that the spread between the short and long-term rates was widened, whereas in the United States it was narrowed during that period as a result of the raising of short-term rates concurrently with a rigid pattern of long-term rates

Apart from the rising tendency in long-term rates which had been permitted to take place since 1947 (i.e. from the abnormally low level of $2\frac{1}{2}$ per cent.), no other measure of monetary control was adopted except an effort to restrict bank credit for non-essential purposes. This attempt was made through a tie-up with the control of capital issues, which was continued after the war in respect of bank advances exceeding £50,000 during any period of 12 months. In short, the banks were required to observe the same principles as those which were laid down from time to time for the guidance of the Capital Issues Committee. In general, the banks were asked on various occasions to restrict unessential lending to

a minimum and 'to be guided by the lines of the directives issued to the Capital Issues Committee'.

Although these monetary measures were accompanied by a budget-surplus policy involving very high taxation on incomes and consumption, and by various other instruments of control, they proved to be inadequate to stem the tide of inflation and to avoid a serious unfavourable turn in the balance of payments position. On November 7th, 1951, however, it was at last decided, as explained by the Chancellor of the Exchequer in Parliament, to employ 'additional measures in the monetary field to combat inflationary tendencies by action designed to make possible more direct influence on the volume of credit'. These measures comprised, in the first place, the raising of the Bank of England rate from 2 to 2½ per cent. and the restoration of flexibility to the short-term market. The latter was achieved by abandoning the previous arrangements 'under which in practice the Bank Rate was quite ineffective and the Bank of England supplied the needs of the money market at fixed and very low rates'. Accordingly, a new rate of 2 per cent. was introduced at which the Bank would be prepared, when necessary, to lend to the market against Treasury bills; while the rates for Treasury bills were henceforth 'to fluctuate according to supply and demand subject to day-to-day operations by the authorities' The immediate result was a rise in the Treasury bill rate from ½ to over ¾ per cent and to 1 per cent by the end of 1951.

A further step was to reduce the floating debt to more manageable proportions by offering an issue of £1,000,000,000 of 1, 2 and 3-year stocks in exchange for Treasury bills. This issue was fully taken up by the British banks and by other British or foreign holders of Treasury bills One of the effects of this funding of Treasury bills was to lower the liquid-asset ratio of the commercial banks, which, in turn, reduced their capacity or willingness to extend credit.

Another result of the new monetary policy was a further rise in net market yields for long-term Government securities to an average of over 4 per cent by the end of 1951. Various other rates, including those of the commercial banks, were also raised as part of the whole set-up of scarcer and dearer money

In addition to the above, an urgent appeal was made by the Chancellor of the Exchequer to the banks and accepting houses 'to continue and intensify their efforts to restrict credit to essential purposes and, in particular, to ensure the highest priority for our

defence programme and for our exports'. In particular, he urged 'that banking facilities should not be given for the speculative buying or holding of securities, real property or stocks of commodities, that finance for hire purchase should be limited; and that . . bank advances should not in general be made for capital expenditure'. In response to this appeal, the Committee of the London Clearing Bankers issued a statement at the end of November, 1951, to the effect that 'the gravity of the present state of affairs . . . adds emphasis to the need for further action by the banks to make effective the present policy of His Majesty's Government'.

Finally, on March 11th, 1952, the Bank of England rate was further raised from 2½ to 4 per cent. In his Budget Speech on that day the Chancellor of the Exchequer stated that 'the general effect of this rise in Bank Rate should be a further reminder to both lenders and borrowers of the need for caution and economy in our present circumstances', and that it 'can make an important contribution towards the right economic climate, particularly towards the diversion of resources from investment above all, to export'.

The immediate effect of the rise of 1½ per cent in Bank rate was an increase in money rates and market yields generally. Thus, the Treasury bill rate rose from 1 to over 2¼ per cent, while the clearing banks raised their deposit rate from ¾ to 2 per cent. and also adjusted their rates for loans and advances. The discount market likewise raised its buying rates for bank and trade bills

In September, 1953, however, Bank rate was reduced by ½ per cent. to 3½ per cent, and although the special rate for loans to the market against Treasury bills was kept at 3½ per cent, the Treasury bill rate and the banks' deposit rate promptly dropped by ¼ per cent., while other rates and market yields also declined in various degrees. The general easing of the monetary situation in Great Britain was, no doubt, related to the improvement in the country's balance of payments and the steady increase in its gold and dollar reserves, and it was reinforced by a further reduction in Bank rate to 3 per cent in May, 1954.

Conclusion. Since 1946, therefore, a progressive revival of monetary policy has taken place in an increasing number and variety of countries This change in trend from a relatively rigid cheap-money policy to a flexible and more realistic monetary policy is to be attributed, in the first instance, to the persistence, after the War, of world-wide inflation of prices and costs and to the inability of Governments to stop the inflationary process with non-monetary measures. It thus came to be recognized more widely

that the war and post-war inflation of the money supply had been one of the principal contributory factors in the general inflationary movement, that, while fiscal measures and physical, investment, price and wage controls had important functions to perform in the campaign against inflation, the extent to which they could be applied in the prevailing circumstances was limited by both international and domestic political considerations; and, consequently, that the fight could not be won without also mobilizing all the available instruments of monetary technique, whether their impact was direct or indirect and their effect was immediate or deferred.

The monetary contribution to the world price inflation and, accordingly, the need for monetary measures to stop it, can best be understood by tracing the background of the inflationary process Briefly stated, the primary sources of the several stages of inflation since the 'thirties were, firstly, the tremendous expenditures and losses connected with the Second World War; secondly, the heavy cost of post-war reconstruction and reconversion; and thirdly, the considerable burden involved in the waging of the Korean war and the adoption of comprehensive rearmament and stockpiling programmes by the United States, Great Britain and many other countries In addition, large current and capital expenditures were incurred on social services and other amenities which were not directly or immediately productive, if at all. All these expenditures increased aggregate money incomes and purchasing power as well as taxable capacity and the ability to save. But although taxation and saving were actually increased very considerably, particularly during the War, and served to restrict expenditures in the private sector, they were nowhere increased sufficiently to cover the huge expansion of public expenditures. This gap was conveniently filled from time to time by the creation of bank credit which naturally increased money supply far in excess of the expansion of production and trade.

This creation of bank credit was reflected mainly in the tremendous increase in the holdings of Government securities by central and commercial banks all over the world—a process which has come to be described as the monetization of public debt. Secondly, bank credit was, of course, also expanded on account of the increased volume of production and trade, and because of higher prices and wages which caused an automatic need for larger working capital. Thirdly, in many countries the

increased book value of official gold stocks, whether due to an increase in quantity or to a formal revaluation of gold reserves (on two or more occasions in some cases), and/or the increased book value of foreign exchange reserves due to favourable balances of payments or a revaluation of foreign assets, formed the basis of an additional expansion of bank credit besides directly augmenting the money supply. The second and third factors were, in fact, related to the first in that their contribution to the expansion of incomes and of the money supply was mainly the result of higher prices and depreciated currencies which, in turn, could be attributed largely to the undue creation of bank credit for Government purposes. Interaction between these factors, thus, tended to have a cumulative effect upon the inflationary spiral.

The outcome of the combined operation of all these factors was a phenomenal increase in the money supply during the period of 12 years from 1939 to 1951, namely, almost 3 times in Great Britain and Holland; more than 3 times in the United States and Canada; almost 4 times in India and the Union of South Africa; more than 4 times in New Zealand; almost 7 times in Australia; 17 times in France; and 50 times in Italy. The lowest increases were those of about 2½ times in Switzerland and Sweden

In general, the available evidence clearly showed that the excessive increase in the money supply had been not only an important contributory factor in the persistent and pernicious world-wide inflationary trend but also an essential condition for the continuation thereof Thus, apart from measures to step up production and eliminate waste in both the public and the private sectors of the economy, the obvious method of stopping the inflationary trend was to reverse the process by which the existing degree of inflation had been rendered possible, i e. by making money scarcer and dearer through contracting the total volume of bank credit by any available means and raising official rates of discount and interest, the extent and duration of such action in any particular country to depend upon the severity of the actual and potential inflation prevailing in that country, on the one hand, and its inherent potentialities for economic expansion and new development, on the other.

As shown previously, many countries did have recourse in various ways and degrees to a tight-money policy as an anti-inflationary measure, some as early as 1946-47 and others only in 1950-52. In several cases this policy was also deliberately aimed at correcting or alleviating a serious disequilibrium in the balance of

payments, in particular with the dollar area. In due course, however, most of the countries concerned decided to modify their monetary policies with a view to bringing about some easing of money rates as soon as inflationary pressures began to subside and/or the balance of payments position showed a substantial improvement. Thus, a flexible monetary policy is once again being followed in order that money-market conditions may be tightened or eased in accordance with the requirements of the prevailing economic situation.

In conclusion, while it is true that, under existing conditions of economic rigidity and complexity, there is much less scope for an effective discount-rate policy than was the case in the days of the international gold standard, the experience of several countries in recent years confirms that changes in discount and interest rates can nevertheless still perform a useful function to the extent that they serve to correct wrong trends in any particular set of circumstances.

In an inflationary situation, it can at least be said that higher short and long-term rates operate in the direction of reducing not only the demand for credit but also the availability thereof, whether for purposes of consumption, investment or speculation. Higher rates, for example, contribute towards restricting the availability of credit both through the actual decline in the market value of the much larger volume of securities now held by banks and other financial institutions and the uncertainty concerning the future movements of rates and the money supply, particularly where it is known that an official disinflationary monetary policy is being followed. The availability of credit can, of course, be further reduced by restricting the lending operations of banks and other institutions through legal directives or moral suasion, as was actually done in many countries; or by limiting the credit-creating capacity of commercial banks in one or more different ways, namely, through a net contraction of central bank credit, or through an increase in the minimum cash reserves to be maintained by them, as in the United States and Western Germany, or though requiring them to keep minimum secondary reserves of short-term Government securities and other specified assets, as in Belgium, Italy, France, Sweden, Mexico and India; or by reducing the liquidity of financial institutions generally through inducing them to convert a substantial part of their holdings of Treasury bills into special short-term Government stocks, as in Great Britain, or of certain marketable Government stocks into non-

marketable securities at a higher rate of interest, as in the United States. Finally, the influence of rising rates on human psychology in general can also be relied upon to assist in restricting consumption and encouraging saving.

On the other hand, because of the enormous increase in national debts and the danger of disruption of the financial structure through unduly sharp declines in the market values of all kinds of fixed-interest securities, there are obvious limits to the extent to which interest rates can be raised as an anti-inflationary measure. Within these limits, however, there should be sufficient scope for positive results being achieved by discount-rate policy provided it is accompanied by other instruments of monetary technique which serve, in one way or another, to restrict the availability of credit, and of which various examples have already been given.

Likewise, the use of discount-rate policy as an anti-deflationary measure should, notwithstanding the limitations mentioned in earlier chapters, still make a valuable contribution, in conjunction with the other available instruments of credit control, towards achieving the desired objective through prompt and appropriate adjustments in the cost and the availability of credit.

CHAPTER XVII

THE INTERNATIONAL MONETARY FUND AND THE INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT.

Introduction. Inter-war experience in the field of international trade and finance had demonstrated that the gold standard was not sufficiently elastic and adaptable in a world of increasing economic rigidity and complexity and that, in consequence, some measure of flexibility in the exchange rates was a necessary compensatory factor. On the other hand, experience had also shown that independent managed currencies, responsive to divergent national monetary and economic policies, tended to be accompanied by unilateral and disorderly changes in the exchange rates, which were frequently unjustifiable on economic grounds, and by other restrictive devices in the trade and financial spheres Such measures, while designed to secure an immediate national advantage or to prevent a worsening in a country's relative economic position, frequently did so only at the expense of other countries and, in the longer-run, of the country itself, through the resulting contraction in the volume of world trade. In addition, their effect upon the maintenance of an adequate flow of international investment – in itself essential to the continuance of a high level of world trade and of production and employment – was extremely adverse It was apparent that the continuation of such policies in the post-World War II period, after taking into account the physical destruction, the waste of resources and the economic disruption and disequilibrium caused by the war, would be little short of disastrous.

The best way of meeting these problems was the subject of much public discussion from 1943 onwards which culminated in the Bretton Woods Conference of July, 1944, held under the auspices of the United Nations From this Conference emerged plans for an International Monetary Fund and an International Bank for Reconstruction and Development which, by the end of 1945, had been ratified by a sufficient number of governments of the United

Nations[1] to bring the institutions into existence.

Objectives of the Fund and Bank. The objectives of the Fund and the Bank were naturally determined by the problems which had led to the establishment of these institutions. Thus, the Fund's major objectives were, firstly, to promote international monetary co-operation by providing permanent machinery for consultation and collaboration on international monetary problems; and, secondly, 'to facilitate the expansion and balanced growth of international trade' which would, in turn, 'contribute to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members.' With a view to the attainment of the latter objective, the Fund was intended, in particular, to promote exchange stability and orderly exchange arrangements, to assist in the elimination of exchange restrictions which hampered world trade and, in addition, to extend financial help, subject to certain safeguards, to member countries temporarily suffering from an adverse balance of payments so as to provide them with an opportunity of restoring equilibrium without resorting to measures which would militate against their own prosperity and that of other nations.

While the Fund, as one means of achieving these aims, was to use its resources to assist members in temporary balance of payments difficulties, the Bank was designed to furnish assistance mainly in the longer-term investment field. By assisting, in various ways, in making capital available for reconstruction and development in member countries, it would thus also contribute to a balanced and expanding world trade and to the promotion and maintenance of high levels of employment and real income Its activities could, therefore, be considered as complementing those of the Fund and as promoting the same ultimate objects.

International Monetary Co-operation. The inter-war years had provided instances of international financial co-operation between Governments as well as central banks,[2] but it had been sporadic

[1] Provision was made for the subsequent admission of other nations to membership in the Fund and the Bank

[2] Examples of such co-operation amongst central banks are the revolving credit granted by the Federal Reserve Bank of New York to the Bank of England in 1925, the credits extended by a group of central banks to the National Bank of Belgium, the Bank of Italy, the Bank of Poland and the National Bank of Roumania during the years 1926-1929, and the establishment of the Bank for International Settlements in 1930, in which the shareholders were various central banks, and which was instrumental in securing and providing assistance to the central banks of such countries as Germany, Austria, Hungary, Yugoslavia and Danzig in the middle of 1931. Inter-Government financial co-operation, again, was involved in the credits

in nature and restricted in its scope both as to the number of countries involved and as to the field of collaboration covered. The Fund and the Bank, however, were designed to secure much more systematic and regular co-operation between the Governments[1] of the majority of countries in the solution of major international monetary problems.

This objective was achieved in various ways. Firstly, in joining the Fund and the Bank, member countries automatically undertook, both individually and collectively, to collaborate with these organizations in carrying out their purposes. Secondly, in the case of both the Bank and the Fund, ultimate control was vested in a Board of Governors, consisting of one Governor and one alternate appointed by every member country. The Boards were to meet at least once a year and also at such other times as they might decide or as the Executive Directors might require. The latter, again, five of whom were to be appointed by the five members with the largest quotas and share subscriptions, respectively, and at least seven[2] of whom were to be elected by the other member countries, were to exercise control over the operations of the two institutions under powers delegated to them by the respective Boards of Governors.[3] Thirdly, emphasis was laid upon recruitment of the staff on as wide a geographical basis as possible having regard, however, to the 'paramount importance of securing the highest standards of efficiency and technical competence.'

The Fund and Exchange Stability. An immediate objective of the Fund, as stated previously, was to promote exchange stability and orderly exchange arrangements among members; and, for this purpose, a framework of initial exchange parities for the various currencies was to be established, in consultation with member

granted by the Federal Reserve Bank of New York and the Bank of France to the Bank of England, and by the United States and French Treasuries to the British Treasury, during the third quarter of 1931, and, of course, in the Tripartite Agreement of 1936-39.

[1] The collaboration of Governments, which automatically implies that of central banks as the advisers and agents of their Governments, has come to be more essential than the co-operation of central banks in that Governments have everywhere assumed more directly the responsibility for the determination of monetary policy

[2] The number could, however, be increased as additional countries became members, and at present there are eleven.

[3] The Boards of Governors of both institutions have, in fact, delegated all their powers, except those specially reserved to them by the statutes, to the Executive Directors The latter function in continuous session at the principal office of the Fund and the Bank, and the Boards of Governors, which only meet occasionally, have necessarily to place great reliance upon the decisions of the Executive Directors who are in intimate contact with the problems placed before the Fund and the Bank Members, however, have a right of appeal to the Board of Governors from interpretations of the statutes given by the Executive Directors.

countries, using gold as a common denominator. Experience had shown, however, that neither the technical rigidity of the exchanges under the gold standard nor the unilateral fluctuations so common in the 'thirties were desirable under modern economic conditions The Fund Agreement, therefore, provided for alterations in the parity, but subjected them to international control with a view to ensuring that changes were likely to cause a minimum of disturbance to national economies and world trade in general.

It was laid down, for example, that changes in the par value of a member's currency could be effected only on the proposal of the member and after consultation with the Fund, and the proposal could only be made for the purpose of correcting a fundamental disequilibrium. If the proposed change (together with all previous changes whether increases or decreases) did not exceed 10 per cent. of the initial par value, the Fund could raise no objection. If, on the other hand, it exceeded 10 per cent., the Fund could concur or object, but had to concur if it was satisfied that the change was necessary to correct a fundamental disequilibrium. In particular, the Fund, if so satisfied, could not object to the change because of the domestic social or political policies of the member proposing the change [1]

A number of changes in the parities of individual currencies have taken place since the Fund commenced operations in March, 1947, the most noteworthy instance being the devaluation of sterling and a number of other currencies in September, 1949, which is regarded as affording an illustration of the benefits of the Fund arrangements in this respect.

These arrangements could, conceivably, afford an opportunity of representing disequilibrium not only as fundamental but as being capable of correction by means of a parity change alone when, in fact, one or both of the representations might be incorrect. The likelihood of abuse is, however, slight, for the Fund is only required, as previously noted, to concur in a change if it is satisfied that both contentions are valid. Moreover, unauthorized changes in the parity render the member ineligible to use the resources of the Fund[2] unless the latter otherwise determines, and may lead to the compulsory withdrawal of the member from the

[1] It was, of course, provided that when the par value of a member's currency was changed in either direction, suitable adjustments had to be made in the Fund's holding of the member's currency so as to maintain the original gold value of the Fund's assets

[2] A case in point occurred early in 1948 when France desired to introduce exchange arrangements which would have meant not only the devaluation of the franc

Fund. Furthermore, consultation with the Fund must precede any parity change, and the Fund, therefore, may also be able to exercise some degree of moral suasion in discouraging undesirable changes before more serious steps become necessary [1] As against this slight possibility of abuse must be set the undoubted advantage of flexibility in the exchange rates which may often actually contribute to the realization and maintenance of equilibrium and stability

There are, however, various ways in which exchange stability and orderly exchange arrangements may be undermined even in the absence of unauthorized changes in established parities. In order to counteract this, every member is required to give a definite undertaking, on joining the Fund, to collaborate with it 'to promote exchange stability, to maintain orderly exchange arrangements with other members and to avoid competitive exchange alterations.' Apart from this general undertaking, however, the Agreement contains specific provisions relating to certain actions which would undermine exchange stability

Among these is a provision establishing maximum limits[2] on either side of the parity within which the actual exchange rates may fluctuate, and a further provision requiring the Fund to fix a maximum margin above and below the parity for transactions in gold by members The latter provision forbids any member from

but the introduction of a system of fluctuating rates The Fund was prepared to concur in the devaluation of the franc, but was not prepared to agree to the diversion to a market with fluctuating rates of any part of the proceeds of exports. The French Government, however, decided to go forward with its plans notwithstanding the objection of the Fund, and France became ineligible to use the Fund's resources although still retaining membership in the Fund

[1] In practice, the time available for the exercise of moral suasion may be very limited Any information which may leak out regarding a proposed change in parity can have serious consequences for the country concerned, and the matter is not one which is likely to be formally discussed with the Fund before the country itself has taken a decision, or which it could leave outstanding with the Fund for long after the latter has been formally approached The Agreement, in fact, entitles the member to a decision from the Fund within 72 hours if the proposed change exceeds 10 but not 20 per cent of the initial par value, and although it allows the Fund a longer time if the change exceeds 20 per cent, the member would certainly press very strongly for a speedy declaration of the Fund's attitude

[2] It was laid down that the maximum and minimum rates should not differ from parity by more than 1 per cent in the case of spot exchange transactions and, in the case of other exchange transactions, by a margin which exceeded that for spot transactions by more than the Fund considered reasonable In the case of gold transactions by members, the margin above and below parity was fixed at $\frac{1}{4}$ per cent exclusive of charges connected with the refining, transport and handling of the gold, as detailed in section F-4 of the Fund's Rules and Regulations A member whose monetary authorities freely buy and sell gold at prices within the prescribed limits for the settlement of international transactions is deemed, in terms of the Agreement, to be conforming with its obligations to permit exchange transactions only within the limits mentioned This, for example, would cover the case of the United States

buying gold at a price above par value plus the margin and from selling it at a price below par value minus the margin, and while this precludes transactions in gold at premium prices between members, it does not prevent them taking place between parties who are not members or between members and such parties.

Three months after it commenced operations in March, 1947, the Fund became concerned at the volume of premium gold transactions, in that it considered such operations as being conducive to exchange transactions at depreciated rates which undermined the existing parities and, thus, exchange stability Furthermore, the Fund believed that such transactions involved a loss to central gold reserves and facilitated commodity 'shunting' or 'arbitrage' transactions which distorted trade and thus unjustifiably benefited the reserves of some countries at the expense of those of others. Consequently, the Fund recommended, under the authority of the general undertaking by members to promote exchange stability, that its members take effective action to prevent gold transactions at premium prices

Besides the doubts entertained by several countries regarding the validity of some of the Fund's arguments in this respect, the position was complicated by the existence of a market for industrial, as distinct from monetary, gold where premium prices obtained. Several members believed that much of the demand on this market was for genuine industrial purposes, and that the premium was due to the difficulty of obtaining adequate supplies owing to the severe restrictions imposed by the majority of countries on gold sales and movements.[1] It was also suggested from time to time that the premium markets were encouraged by too low an official world price for gold. Furthermore, while some of the Fund's members subjected gold sales for industrial purposes to extremely strict scrutiny, others were not so meticulous and, thus, secured an unfair advantage.

The position was far from satisfactory, and the quantity of gold finding its way into private holdings tended to increase each year in spite of the fact that the Fund, after reconsidering the whole question in 1949, had reaffirmed its original policy in this respect. Eventually, in September, 1951, the Fund again reviewed the matter, and came to the conclusion that conditions in gold pro-

[1] In 1948-49, the Government of the Union of South Africa sought a means of permitting legitimate industrial gold sales at a premium, while 'avoiding external transactions for unauthorized or illegitimate purposes, particularly hoarding'. Agreement was reached with the Fund early in 1949 on 'a series of protective steps . . . intended to secure these ends'.

ducing and consuming countries differed so widely 'as to make it impracticable to expect all members to take uniform measures' to achieve the objectives of its premium gold statement of 1947. While, therefore, reaffirming its belief in the economic principles involved and urging members to support them, the Fund decided to leave 'the practical operating decisions involved in their implementation' to its members. The practical effect of this decision was to permit the Fund's gold producing and other members to sell their gold on the premium market, and the great majority of the gold producing members took advantage of the concession to a greater or lesser extent.

A related problem was the question of the subsidies which certain members desired to pay to their gold producers who were threatened by steadily increasing costs of production in the face of a fixed official price for their product. The Fund was again concerned with the possible effect of a subsidy in undermining exchange stability as, for example, if it tended to cast 'widespread doubt on the uniformity of the monetary value of gold in all member countries'. A subsidy in the form of a uniform payment per ounce of gold produced might also have the effect of raising the total price to a point in excess of parity plus the prescribed margin

The Fund, in stating its policy on this issue late in 1947, recognized that certain forms of subsidy might not conflict with the attainment of the Fund's purposes. Each case, however, would have to be examined in the light of the circumstances of the time, and any decision would have to be the subject of periodical review.[1] This broad and flexible policy has not had to be modified to date.

Implicit in the Fund arrangements relating to changes in parities is the conception that any change effected should be from one fixed parity to another. Flexibility of the exchanges under the Fund system does not mean fluctuating rates save within the permitted limits of 1 per cent. on either side of the parity

The difficulties of empirical calculation in determining a new par value are, however, very generally recognized, while few countries of significance would be prepared to agree to a series of relatively short-term changes in their parities which the adoption of a

[1] The Fund has, for example, agreed to subsidies to gold producers in Canada. The subsidy has been related to the difference between a certain basic cost of production and the actual costs of production of the various producers, and has, thus, varied from producer to producer There has been no question, thus, of it taking the form of a uniform increase in the price paid for gold

process of trial and error would involve In certain cases, therefore, countries in proposing a new fixed parity to the Fund appear to have had regard *inter alia* to the level of the free market quotations for their currencies as affording some practical, if not altogether reliable, guide in the matter, and have then tended, as a precautionary measure, to make the official change rather larger.[1]

Other countries, again, allowed their exchange rates to fluctuate freely, thus letting market forces over a period furnish some guide to the appropriate level at which a new fixed parity could be established.[2] Some countries have also felt that, apart from the difficulty of determining the appropriate parity, the Fund's permitted margin of fluctuation in the exchange rates does not provide sufficient scope for checking undesirable trends in the balance of payments, particularly those caused by movements of capital, and have, at least temporarily, withdrawn official support for the parity[3] Such cases as these may tend to conflict with a strict interpretation of the Agreement, but the Fund, while unable to approve such arrangements, appears nevertheless to have shown adaptability in recognizing the exigencies of the situation, and has made no strenuous objection to the adoption of the procedure as a temporary expedient.

Apart from such changes as may be made in the parities of individual currencies, the Fund is itself empowered, by a majority vote and provided every member whose quota amounts to 10 per cent. or more of the aggregate quotas agrees, to make a uniform proportionate change in the par values of all member currencies and, thus, to raise or lower the world price of gold. Any member, however, may prevent the change in the case of its own currency by advising the Fund of its objection.

The circumstances in which the Fund's power to raise the world price of gold should be exercised have been the subject of some controversy,[4] since the Fund Agreement provides no direct guide in the matter.

[1] When sterling was devalued in September, 1949, for example, the Chancellor of the Exchequer made it clear that the change in parity had been rather more extensive than might be strictly necessary, as a further devaluation of sterling in the near future could not be contemplated

[2] Mexico may be mentioned as a case in point It finally decided upon a new parity in June, 1949 This parity, however, had to be lowered in April, 1954.

[3] Canada followed this procedure in September, 1950, to check an undesirable, and largely speculative, capital inflow from the United States which was augmenting internal inflationary pressures and increasing the foreign debt and the annual service charges Canada has not yet re-established a fixed parity with the Fund

[4] The Union of South Africa has, since 1949, led the campaign to secure Fund agreement to an increase in the world price of gold The arguments have, in the main, been that the considerable war and post-war inflation of prices and costs

Limits on Exchange Restrictions. Exchange stability would, in the long run, be dearly bought if it meant the maintenance of restrictions on current transactions as a permanent feature of the world economy. The Fund, therefore, in addition to promoting exchange stability, is required to encourage multilateral trade and elimination of restrictions which hamper the growth of world trade. A first step to this end was to ensure that the introduction of new restrictions on current transactions[1] would only take place where essential, and countries, on joining the Fund, accordingly assumed the general obligation of securing the Fund's prior approval to the imposition of such restrictions.[2]

It was recognized, however, that the post-war transitional period would be accompanied by extensive and rapid change and adjustment in the attempt to restore and maintain equilibrium, particularly in the case of countries which have been occupied, and that monetary reserves alone, even after allowing for such assistance as the Fund could render, might prove inadequate to meet the situation. The Agreement, therefore, provided that during this period existing restrictions on current payments and transfers might be maintained and adapted to

demands an appropriate adjustment of the gold price, and that international liquidity in the case of most member countries of the Fund is too low due, very largely, to the existing maldistribution of gold reserves and the tremendous increase in the credit structure of the world as a whole. This situation, it is contended, exercises a trammelling effect on international trade and payments, and hampers the removal of restrictions and the return to general convertibility. As it is unlikely that monetary gold stocks will become better distributed, or gold production (which is curtailed by the pressure of increasing costs against a fixed price of gold) will be increased, extensively or speedily enough to bring relief within a reasonable time, the alternative is held to be an increase in the world price of gold.

The Fund, as well as the United States (which has been the largest buyer of gold for many years), have consistently opposed these views, largely on the grounds that the effect of an increase in the world price would be undesirably inflationary under present conditions, and that assistance in the struggle for the removal of restrictions and the return to convertibility is better given directly to the countries where it is likely to be most effective. The United States, in addition, has advanced certain arguments of a political nature against an increase in the gold price.

It would seem, however, that the cause sponsored by the Union of South Africa is gradually gaining more adherents among the Fund's members.

[1] Payments for current transactions are defined as 'payments which are not for the purpose of transferring capital', and include, *inter alia*, 'payments of moderate amount for amortization of loans or for depreciation of direct investments' and 'moderate remittances for family living expenses.'

[2] Approval to impose temporary restrictions on current transactions in a currency would, *inter alia*, generally follow if the Fund formally declared that currency to be scarce in the circumstances mentioned later in the text. Consultation with the Fund would still be required, however, and although a member has complete jurisdiction in regard to the nature of the limitations imposed in such circumstances, they may not be more extensive than is necessary to limit the demand for the currency to the supply. Furthermore, they must be relaxed and removed as soon as possible, and the right to impose them in any case expires as soon as the Fund formally declares the currency to be no longer scarce.

changing circumstances and, in the case of countries which had suffered occupation, new restrictions might be introduced if necessary. Continuous regard, however, was to be had to the purposes of the Fund in determining foreign exchange policies, and restrictions were to be withdrawn as soon as this could be done without unduly encumbering the member's access to the Fund's resources.

No definite limit was set to the transitional period, but not later than three years after the date on which the Fund began operations, and in each subsequent year, the Fund was required to report on the restrictions still in force against current transactions. Moreover, after the Fund had been in operation for five years, any member still retaining such restrictions was to consult the Fund as to their further retention, but the Fund might at any time exceptionally represent to a member that conditions were favourable for the withdrawal of a particular restriction or for the general abandonment of exchange restrictions on current transactions.

Although the Articles did not define the end of the transitional period, the language used suggested that it might not exceed five years. As events have turned out, all but ten of the Fund's members were still availing themselves of these transitional arrangements in April, 1954. Circumstances have been far more difficult in the post-war period than was anticipated at the Bretton Woods Conference, and the Fund, as evidenced in the various reports which it has issued on exchange restrictions, has shown a sense of understanding and realism in its approach to the problem of eliminating these restrictions which may show earlier and better results than any attempt prematurely to force its members' hands.

As regards restrictions on capital movements, which were often of a highly disturbing nature in the 'thirties, individual members may impose such restrictions as are necessary for the purpose of regulation.[1] The Fund, moreover, is empowered to request a member to impose controls over capital transactions in order to prevent net use of the Fund's resources in financing a large or sustained outflow of capital.

It should be added that the benefits resulting from the elimination of exchange restrictions, whether of a discriminatory

[1] No member may, however, exercise control over capital transfers in a manner which will restrict payments for current transactions or which will unduly delay transfers of funds in settlement of commitments

nature or not, would be materially reduced or even entirely offset were the restrictions to be replaced by discriminatory currency arrangements or multiple currency practices which, from the point of view of stability and orderliness in the exchanges as well, are undesirable[1] The Fund Agreement, therefore, requires all members to obtain the Fund's authority for the introduction of such practices and, in respect of existing procedures of this nature, to consult with the Fund in regard to their progressive removal. The arrangements relating to the transitional period, however, apply to these practices as well and, as in the case of exchange restrictions, their removal has been a much more difficult, and a much slower, process than originally anticipated. The Fund, however, has been active in this field, and has enjoyed some measure of success in securing, if not their entire abolition, at least a progressive reduction in the number of rates quoted in the countries concerned and in the volume and importance of transactions at rates other than the official parity

Use of the Fund's Resources Instability in the exchange rates and the introduction or maintenance of exchange restrictions during the inter-war period had, in no small measure, been due to the inadequacy of the gold and exchange reserves of many countries, and the consequent need to protect them from any unusual drain however temporary it might, in fact, prove to be. There was every likelihood that the strain on reserves would be intensified by the dislocations arising out of World War II and, in some cases, by other fundamental factors, and that many countries would need both help and time to stabilize their currencies, to restore equilibrium in their balance of payments and to relax or abolish exchange restrictions on current transactions. Even when these initial problems have been solved, countries would, in all probability, still be in need of assistance from time to time to cope with unusual but temporary drains upon their reserves

The Fund, therefore, was placed in control of a pool of resources contributed by all its members which would constitute a second line of reserves, and from which members might, in need, draw the currencies of other members against payment in their

[1] The effect of removing exchange restrictions can, of course, also be offset to some extent by the imposition of direct import and/or export controls, tariffs, etc Control in the latter field, however, was to have been exercised through the establishment of an International Trade Organization which, in regard to certain matters of common interest, would work in collaboration with the Fund. The I.T O has not been established, but the General Agreement on Tariffs and Trade, to which the majority of nations have subscribed, exercises a rather more limited control in this area

own currencies. The contribution of every member to the pool was based upon a quota[1] allotted to the member, and was paid partly in gold and partly in the member's national currency.[2]

The quotas allotted to the forty-four countries represented at the Monetary Conference totalled U.S. $8,800,000,000 and, being based on such factors as the national income, gold holdings, foreign trade and fluctuations in the balance of payments, differed materially in size from country to country,[3] the range being from $2,750,000,000 in the case of the United States to as low as $500,000 in the case of Panama. Since that time, other countries have joined the Fund, while some of those originally represented at the Conference have failed to ratify the Agreement, and one country has withdrawn from the Fund after ratifying the Agreement. Certain individual quotas have also been adjusted and, as a result of these changes, the membership in the Fund at the end of December, 1953, totalled 55 countries with quotas aggregating U.S. $8,738,500,000

Access to the pool of resources was made subject to certain safeguards[4] designed to prevent abuse. These took the form, in the first place, of imposing limits upon the extent to which a member might purchase the currencies of other members from the Fund in exchange for its own currency,[5] namely, that the Fund's holdings of a member's currency might not, during any consecutive twelve months, increase by more than 25 per cent

[1] The quota also serves as the basis of a member's voting power in the Fund Each member, thus, has 250 votes plus 1 for each U S $100,000 of its quota which, however, is subject to modification in voting on certain special issues

[2] In the case of original members, the minimum gold payment was equivalent to 25 per cent of the member's quota or 10 per cent of its net official holdings of gold and U S dollars whichever was the smaller at the time As regards other members, the Fund could determine the extent of the gold payment. The payment in national currency could be made in the form of a deposit with the central bank in the Fund's name, or partly in this form and partly in that of non-interest-bearing Treasury bills or other Government obligations payable in local currency on demand The latter alternative was intended to save a Government from having to pay a larger part of its currency subscription in cash (and, perhaps, from having to borrow at interest for this purpose) than was required for the Fund's immediate needs in that currency

[3] Provision was, of course, made for changes in the quotas as the relative position of countries could naturally be expected to alter from time to time, and as the aggregate of quotas might have to be adjusted in accordance with changes in, for example, the dimensions of world trade and balance of payments fluctuations No quota could be changed, however, without the consent of the member concerned

[4] The Fund has discretion, however, to waive these safeguards on terms which protect its interests

[5] A member can at any time obtain foreign currencies from the Fund in exchange for gold, and must acquire them from the Fund if the terms it offers are at least as advantageous as those obtainable elsewhere. This, however, does not preclude a member from selling in any market gold newly produced from mines within its territories.

of the member's quota,[1] nor might the total at any time exceed 200 per cent. of the quota. In addition, however, such purchases were made contingent upon the satisfaction of certain conditions. The member, thus, must represent that the currencies are presently needed for making payments which are consistent with the provisions of the Fund Agreement,[2] and, further, the Fund must not have declared the currency which it is desired to purchase, scarce, or the member, desiring to make the purchase, ineligible to use the resources of the Fund.

The Agreement contains other less direct safeguards against misuse of the Fund's resources, but circumstances could still arise where a legitimate demand for a currency might become persistent and extensive enough seriously to threaten the ability of the Fund to supply the currency in question. In this event, the Fund must declare the currency scarce, and 'thenceforth apportion its existing and accruing supply of the scarce currency with due regard to the relative needs of members, the general international economic situation and any other pertinent considerations'[3].

The Fund has, on the whole, been cautious in permitting access to its resources,[4] apparently because in the disturbed conditions which have obtained since it commenced operations — much of it symptomatic of fundamental disequilibrium in one or other form — demands on the Fund could very easily be for purposes

[1] The 25 per cent limitation, however, was to apply only to the extent that the Fund's holdings of a member's currency had been brought above 75 per cent. of its quota if they had been below that amount

[2] The Executive Board of the Fund, however, decided from the beginning that it could for good reasons challenge the correctness of the member's representation and, if it found this to be incorrect, postpone or reject the request, or accept it subject to conditions In the opinion of the Executive Board, therefore, access to the Fund's resources is not an automatic right The Fund has, however, since modified its view to the extent of stating that a member can count on receiving the 'overwhelming benefit of any doubt' in respect of drawings which would not raise the Fund's holdings of its currency to more than its quota Such drawings would be equivalent to the member's gold subscription, except in cases where the Fund's holdings of the member's currency have been reduced below the amount of the member's currency subscription.

[3] The Fund is empowered to replenish its holdings of a currency by selling gold to the member concerned, or by arranging with the member to borrow its currency, and would presumably take these possibilities into account before declaring a currency scarce.

[4] There have been frequent complaints that the Fund has been over-cautious in permitting access to its resources and has, correspondingly, been of much less use to its members than anticipated. The volume of Fund transactions certainly showed a marked decline from the second quarter of 1948 onwards, that is, after the Fund's announcement that requests to purchase U S. dollars by countries which participated in the European Recovery Programme should occur only in exceptional or unforeseen cases Perhaps the Fund has had this criticism in mind in its recent efforts to facilitate access to its resources through simplifying drawings within a member's gold subscription, the institution of 'stand-by' arrangements, the modification of

inconsistent with the Agreement.[1] The Fund, thus, has not been obliged to call the scarce currency provisions into operation.

Normally, a purchase of currency from the Fund is arranged as and when the currency is actually required by the member Special circumstances, however, may sometimes make it desirable for a member to have a definite undertaking in advance — for example, as a condition precedent to some action which the member proposes to take — that the Fund will accede to a request for assistance. To meet such cases, the Fund has recently introduced a system of so-called 'stand-by' arrangements, in terms of which a member may, in accordance with the Fund's normal criteria for judging applications for assistance, be authorized to draw, in need, on the Fund up to a specified amount and over a certain period without further formality.[2]

Since the resources of the Fund were intended to constitute a revolving pool and, thus, to provide only temporary assistance, members making use of them were provided with a further inducement to restore equilibrium as soon as possible in the shape of progressively increasing charges on accommodation received from the Fund. In addition, therefore, to the normal service charge of $\frac{1}{2}$ per cent. which is paid by a member on purchasing currencies from the Fund in exchange for its own currency,[3] a charge is levied on the Fund's holdings of a member's currency in excess of the quota,[4] provided the excess continues beyond a period of six months. The rate of this charge increases progressively according to both the duration and the amount of the excess and, therefore, penalizes continuous as well as increasing use of the Fund's resources.

With the same object in view, namely, that the financial assistance extended by the Fund to its members should be temporary

charges on members' drawings and the attachment of a definite time limit to the period for which its resources may be used

[1] The fund was, for example, prohibited from providing facilities for relief and reconstruction or from dealing with international indebtedness arising out of the war.

[2] An arrangement of this sort was concluded between Belgium and the Fund in June, 1952, for an amount of U.S $50,000,000 and covering a period of six months subject to renewal for further periods of six months up to a maximum of five years.

[3] If a member buys foreign currencies from the Fund with gold, it may only be asked to pay a small handling charge

[4] A member must pay its quota in full, partly in gold and the remainder in its own currency As gold is convertible into any member currency, the gold payment is equivalent to a contribution of foreign currencies to the Fund, and a member may, thus, in a certain sense be said to be receiving accommodation from the Fund only to the extent that its purchases of foreign currencies from the Fund exceed its gold subscription, that is, when the Fund's holdings of the member's currency exceed its quota

in nature and that its resources should, therefore, revolve, provision is made for a system of annual mandatory repurchases by members of their currencies from the Fund. Such repurchases must be effected in gold and/or convertible currencies in accordance with a procedure laid down in the Agreement. The extent of the annual repurchase is determined in relation to changes over the year in the Fund's holding of the member's currency. Repurchases, however, may not be carried to a point at which the member's monetary reserves are below its quota or the Fund's holdings of its currency below 75 per cent. of its quota and, in addition, the Fund's holdings of any currency used in effecting the repurchase may not be brought above 75 per cent. of the quota of the member concerned.[1]

It should be noted, however, that a repurchase obligation also arises in the case of those members which originally paid less than 25 per cent. of their subscription in gold, even if they have not made use of their drawing powers on the Fund. The concession in the matter of the gold subscription was not intended to be permanent, but merely to ease the payment of an initial gold subscription by members whose holdings of gold and dollars were low at the time. Provided the monetary reserves of these members are not lower than their quotas, therefore, they are required, as in the case of members which have made use of the Fund's resources, to devote a part of any increase in those reserves to repurchasing their currencies from the Fund until the Fund's holdings thereof are reduced to 75 per cent. of the respective quotas. The limitation upon any currency used in effecting the repurchase naturally applies in this case as well

The Fund's experience over a number of years has demonstrated that circumstances may exist where a member's monetary reserves are unlikely to increase sufficiently to give rise to a repurchase obligation, even though the member's economic situation has greatly improved. In addition, the Fund has come to feel that 'a concrete and practical procedure which would give increased confidence to members that the Fund's resources would be available to them', provided the revolving nature of its

[1] The Fund Agreement also permits members to repurchase voluntarily at any time and in exchange for gold, the Fund's holdings of their currencies in excess of their quotas With a view to further assisting in the maintenance of the revolving character of the Fund's resources, however, the Executive Board has decided that, provided no outstanding mandatory repurchase obligation exists at the time (which would, of course, take precedence), and subject to the Board's approval and to the two 75 per cent limitations upon mandatory repurchases mentioned in the text, convertible currencies as well as gold may be used in effecting voluntary repurchases.

resources was preserved, would promote more active use of the Fund and, thus, enable the organization better to serve its members. Accordingly, the Fund decided early in 1952 that, in principle, assistance by the Fund should not extend beyond a period 'reasonably related to the payments problem' in respect of which it had been granted, and that 'this period should fall within an outside range of three to five years'. A member purchasing currencies from the Fund in exchange for its own currency would, therefore, be expected to agree that, within a maximum period of five years, 'there will be an equivalent repurchase of the Fund's holdings (of its currency) unless they have otherwise been reduced'. An extension of time would, of course, be considered if events beyond the member's control rendered repurchase within the maximum period impossible.

Nature and Extent of the Fund's Operations. Between the 1st March, 1947, when it commenced operations, and the end of 1953, the Fund had sold U.S. dollars to the amount of $919,500,000, and pounds sterling, Belgian francs and German marks to the equivalent of U.S. $191,600,000, $11,400,000 and $4,400,000, respectively, to twenty-four of its members in exchange for their own currencies. Furthermore, one member had purchased $6,100,000 from the Fund in exchange for gold. During the same period, nineteen members repurchased their currencies from the Fund, either voluntarily or in terms of their obligation under the Agreement, using for the purpose gold and U.S. dollars to the value of U.S. $360,200,000.

In addition, of course, to rendering purely financial assistance to its members, a great part of the Fund's activities consists in exercising the controlling functions in the international monetary sphere which have been entrusted to it and in furnishing its members with technical assistance in this field, which its staff of experts and the nature of its management make it particularly suited to supply.

The International Bank for Reconstruction and Development. As mentioned at an earlier stage, the International Bank was designed to render assistance to its members mainly in the longer-term investment field. It was, thus, to assist in reconstruction and development by facilitating the investment of capital for productive purposes, primarily by encouraging foreign investment through private channels by means of the Bank's guarantee or its participation. Should such investment not be available on reasonable terms or in adequate amounts, however, the Bank was also

empowered to supplement it from its own capital and other resources or from funds raised by it. In pursuing these aims, the Bank would necessarily assist the Fund in promoting an expanding and balanced world trade and, thus, the maintenance of high levels of employment and real income, while its constitutional structure, like that of the Fund, was also designed to further the cause of international monetary co-operation

The Bank's Guarantee. The priority given to the use of the Bank's guarantee stemmed from a desire to encourage private foreign investment without interfering with the normal channels through which it flowed The guarantee was expected to improve the status of a foreign loan in the lending country and, thus, not only to increase the volume of funds invested but also to reduce the rate of interest paid. Furthermore, the guarantee of the Bank, as an international organization, meant that the risk was spread over all member countries in that all countries might be expected to benefit from the expansion of international investment.

As events transpired, relatively little use has so far been made of the Bank's guarantee which has only been employed in connection with the resale by the Bank to private investors of bonds acquired through the Bank's direct loans.[1] The reasons have probably been, *inter alia*, the lower relative cost which normally attaches to a large issue by a well-known and powerful institution than to a number of smaller issues even if guaranteed by that organization; the difficulties involved in securing approval for foreign issues on the American market; and the possibility that borrowers might consider the guarantee as being in some measure detrimental to their credit standing

Sources of Funds for the Bank's Direct Loans. The assistance rendered by the Bank has, therefore, mainly taken the form of direct loans from its own resources and from funds borrowed by it.

The Bank's own resources available for lending consist of its unimpaired paid-up capital and profits and its reserves, apart from the special reserve to which is placed all the commission charged on loans and guarantees.[2]

The authorized capital stock of the Bank was initially fixed at \$10,000,000,000, of which \$9,100,000,000 was allotted to the

[1] By the end of 1953, the Bank had sold bonds out of its portfolio to the amount of \$55,000,000 with its guarantee, and \$29,000,000 without its guarantee.

[2] The Bank's Articles provide that the rate of this commission on loans made by the Bank out of borrowed funds and on guarantees during the first ten years of the Bank's operation may not be less than 1 per cent nor more than 1½ per cent per annum.

forty-four countries represented at the Bretton Woods Conference. As in the case of the Fund, however, some of these countries failed to ratify the Agreement, and one country withdrew after ratifying the Agreement, while other countries have since joined the organization. In addition, the subscriptions of several countries have been adjusted, and the position at the end of 1953 was that fifty-five countries were members of the organization and held capital stock amounting to $9,038,500,000 [1]

Only 20 per cent of this subscribed capital, however, could be called-up, 2 per cent. being paid in gold or U S dollars and the remaining 18 per cent. in local currency, while the balance of 80 per cent. may only be called-up[2] to meet the Bank's obligations in respect of its own bonds or guarantees. It is only this 20 per cent. of the subscribed capital which is available for lending, but a further limitation exists in that in respect of the 18 per cent. paid in local currency, the consent of the country concerned to the release of its currency must be obtained before the currency may be used by the Bank for its loans

The Bank has consistently stressed the desirability of its members releasing as large a part as possible of their currency payments for lending purposes, not only because its available loan funds are thereby increased and that loans in a variety of currencies tend to emphasize the international nature of the Bank, but because many member countries find it easier to service loans in certain currencies than in others The majority of the Bank's members have, in fact, made such releases subject to varying conditions, and some of them have also agreed — again with varying limitations — that amounts repaid on loans made in their currencies or obtained by the Bank from the re-sale of the borrower's obligations may be reloaned.[3]

In addition to the funds deriving from the Bank's paid-up

[1] Membership in the Bank is limited to members of the Fund, and as in the case of the quotas in the latter institution, there are wide variations in the amounts of stock allotted to individual members Share subscriptions may be adjusted as necessary from time to time and, as in the case of the fund, the stockholding determines voting power, each member having 250 basic votes plus one vote for each $100,000 of stock held

[2] In the event of such a call, payment may be made at the option of the member country in gold, United States dollars or in the currency required to discharge the obligations of the Bank for the purpose for which the call was made Each member's liability under the call is its proportionate part of the subscribed capital of the Bank

[3] By September, 1953, 31 of the Bank's members, whose 18 per cent currency payments totalled $1,342,000,000, had released $1,142,000,000 thereof for lending. In some cases these releases were authorized for lending to anyone for purchases anywhere, while in other cases the releases have been made subject to consultation before loans are granted. Certain releases have been made for specific loans, and in other cases the use to which the loan funds may be put has been restricted

capital, it may, as previously mentioned, use its profits and its reserves,[1] apart from the special reserve fund to which reference has already been made.

The other major source of the Bank's loan funds consists of money borrowed by it through the issue of its own obligations.[2] In this respect again, the Bank has endeavoured to stress the international nature of its activities by making issues of loan stock and bonds in the markets of several countries where loan funds have been available. Major recourse has been made to the United States market in that this market has, in the post-war period, been the one with the largest volume of funds available for foreign lending Loans have also been issued, however, in the United Kingdom, Canada and in Switzerland, the last-named being a non-member country.[3] In this connection, the Bank may only borrow funds or guarantee loans with the approval of the member in whose market the funds are raised and the member in whose currency the loan is denominated, and only if the Bank may use the proceeds, or exchange them for other currencies, without restriction by the members.

Restrictions on the Bank's Operations. In the normal course, the Bank is only intended to provide the borrower with such other member currencies as are needed for expenditures connected with the purpose of the loan in the countries concerned, the borrower being required to meet local expenditure out of domestic funds. Exceptionally, however, if the borrower cannot raise local funds on reasonable terms, the Bank may provide, as a part of the loan, an appropriate amount in the borrower's currency, that is, out of the 18 per cent. currency subscription Furthermore, if the project for which the loan is made gives rise indirectly to an increased need for foreign exchange by the borrower, the Bank may, in exceptional circumstances, provide the borrower with gold or foreign exchange not in excess of the local expenditure for the purposes of the loan.

There are various provisions in the Bank's statutes which are designed to ensure that, without sacrificing the objects for which

[1] At the end of 1953, the supplemental reserve which had received all the Bank's net profits (apart from the commissions which the Bank must place to the special reserve account) amounted to $86,600,000

[2] The Bank's outstanding liability on its own issues at September 30th, 1953, was equivalent to 40 2 per cent of the amount outstanding on loans which it had granted

[3] The Bank's outstanding liability in respect of its stock and bond issues at the end of 1953 amounted to the equivalent of U S $653,480,000, of which the amounts payable in Canadian dollars, in sterling and in Swiss francs amounted to the equivalent of U.S $13,600,000, $14,000,000 and $50,840,000 respectively

it was established, it shall not take unnecessary risks to the prejudice of members and others who have supplied it with resources. It is, for example, provided that the maximum overall amount of the Bank's outstanding loans,[1] participations and guarantees may not exceed the total of its subscribed capital, reserves and undistributed surplus. Apart from this, however, all loans made to agricultural, industrial and business enterprises must be fully guaranteed, as to both repayment of capital and payment of interest and other charges, by the Government[2] of the borrower's country, and the same applies to loans to such parties which are guaranteed by the Bank. Further, each loan or guaranteed loan must be the subject of careful study[3] and report by a competent committee and, normally, loans must be made for specific projects of reconstruction and development. Moreover, the Bank must have due regard to the prospects that the Government of the borrowing country (whether it is the borrower or the guarantor) will be in a position to meet its obligations under the loan, and, in general, the Bank must act prudently in the interests of the borrower and the Bank's members as a whole.

Should there be a default in spite of these safeguards, the Bank's members are covered to the extent of the Bank's reserve funds[4] and its undistributed profits Those who have lent money to the Bank, or who have lent money to foreign countries under the Bank's guarantee, however, have the additional protection of the unused portion of the Bank's paid-up capital besides the 80 per cent. of the subscribed capital which can only be called-up to protect these parties from loss.

These measures have been partly responsible for the fact that so far there has been no default on any of the Bank's loans in respect of either capital repayment or interest It is probable, too, that borrowers would be very hesitant to default on loans made or guaranteed by an international organization such as the Bank. Nevertheless, a great part of the credit must be given to the Bank's management which, without neglecting the organization's

[1] The total outstanding loans, at December 31st, 1953, amounted to the equivalent of U S $1,735,000,000 Of the total loans granted, $1,236,000,000 had been actually disbursed at that date, including $998,400,000 in U S dollars, $55,700,000 in Canadian dollars, $31,600,000 in Belgian francs, $85,700,000 in sterling, $21,000,000 in Swiss francs and $16,500,000 in French francs.

[2] The guarantee may also be given by the central bank or some comparable agency of the Government acceptable to the Bank.

[3] The expert investigation which the Bank conducts before making any loan is also, of course, of benefit to the member concerned The rendering of technical assistance to its members is, in fact, a valuable part of the Bank's activities

[4] Including the special reserve fund which, at the end of 1953, stood at £42,800,000.

basic purposes, has steadily resisted the pressure to expand the Bank's loans at the expense of prudence.[1]

This caution, however, has not prevented the Bank from adapting its loan procedures so as best to serve the varying interests of its members. Not only have its loans been granted for varying terms and with varying amortization tables, but the type of loan made has also been adapted to changing conditions. Apart, thus, from the general change in emphasis from loans for reconstruction purposes (which naturally predominated in the first years of the Bank's operation) to loans for development, the Bank has, for example, come to make loans furthering broad programmes of economic development stretching over a number of years. Specific projects still form a component part of these loans, but the wider integrated programme provides for more effective and rapid development. This flexibility and adaptability have been essential elements in the steady progress which the Bank has made.

Conclusion. There is fairly general agreement that the Bank has achieved a great measure of success in its particular sphere, and has, demonstrably, become an essential cog in the machinery of international investment.

The position in regard to the Fund is, perhaps, less clear. It has, for example, been criticized in some quarters on the grounds that it has tended to show too great a regard for legalistic niceties in the interpretation of its statutes and, consequently, to be too rigid in some of its policies, and that it has at times failed to be sufficiently realistic in its approach to the problems which have faced it. Due allowance must, however, be made for the fact that the Fund has to operate in a very difficult and diversified field, that a large part of its work consists of trying to prevent certain actions which are considered detrimental to the general interest even though they may seem to be in the immediate national interest, and that such matters had for long been regarded by nations as falling almost entirely within their own jurisdiction Furthermore, the conditions of disequilibrium which have prevailed over a large part of the world have been more severe than originally anticipated. In these circumstances serious differences of opinion between the Fund and some of its members were bound to occur.

[1] The Bank, unlike the Fund, has to rely largely for its resources on the various capital markets This provides an added incentive for prudent judgment in the loan field as the Bank itself has frequently emphasized.

On the other hand, although it is difficult to determine what the position to-day would have been in the absence of the Fund, there are reasonable grounds for assuming that its presence has at least helped to avoid some of the excesses in the national and international financial spheres which characterized the inter-war period. In any case, as explained previously, the Fund has recently shown greater flexibility and a more realistic approach in various directions, as a result of which much of the previous criticism has disappeared.

In conclusion, it must be borne in mind that the Fund and Bank Agreements represent compromises made at Bretton Woods for the purpose of reaching agreement amongst a large number and variety of nations, and as with compromises generally they have their weak spots. This applies particularly to the Fund In the case of both the Fund and the Bank, however, the actual measure of success attainable at any time depends not only upon the adaptability and efficiency of their respective managements, but also upon the extent to which the member nations are prepared to co-operate with these institutions in the formulation and execution of their policies and to exercise the requisite discipline in the monetary and economic affairs of their own countries in the common interest. In all these respects there is reason to believe that, in spite of various difficulties, considerable progress has already been made, which augurs well for the future of these institutions and for international financial and economic relationships in general.

CHAPTER XVIII

CONSTITUTION AND ADMINISTRATION OF CENTRAL BANKS

Introduction. In view of the fact that the central bank was entrusted with a complete or residuary monopoly of the note issue and with the general control of credit in the national economic interest, and that the major responsibility for the determination of monetary policy came to be vested in the State, the latter almost everywhere claimed the right to increasing participation in the affairs of the central bank. Such participation by the State has taken the form of sole or part ownership of the capital of the central bank and/or the appointment of all or some of its directors and chief executive officers and/or a share in its profits

Ownership of Capital. Prior to 1936 there had been only a small number of entirely State-owned central banks, namely, those of Sweden, Finland, Russia, Bulgaria, Uruguay, Iceland, Australia, China and Iran. Between 1936 and 1945, however, the central banks of Denmark, Canada, New Zealand, Bolivia and Guatemala were nationalized, while virtually all the new central banks which were established during that period were founded as State institutions, namely, those of Ireland, Poland, Thailand, Ethiopia, Costa Rica, Paraguay, Nicaragua and Afghanistan

Since the end of the War the process of nationalization has been carried considerably further. The central banks of England, France, Holland, Norway, Czechoslovakia, Yugoslavia, Hungary, Rumania, Argentina, India and Indonesia have also been converted into State institutions, while the new central banks which have been established in Eastern Germany, Burma, Ceylon, Iraq, Honduras, the Philippines, Israel and the Dominican Republic are all Government institutions.

At present, therefore, central banks are owned entirely by the Government in the majority of countries. There are also a few countries where the Government holds at least half of the capital stock of the central bank, namely, 55 per cent. in Japan, 51 per cent. in Mexico and Pakistan, 50.002 per cent. in Cuba and 50 per

cent. in Belgium[1] and Venezuela. Furthermore, there are several central banks in which the Government has a minority interest, namely, those of Turkey, Colombia, Chile and Ecuador

Accordingly, there are relatively few countries left to-day where the Government does not have any direct share in the ownership of the central bank, namely, the United States, Italy, Switzerland,[2] Western Germany[3], Spain, Portugal, Greece, Egypt, Union of South Africa, Peru and Salvador.

In some countries, the commercial banks were required by law to subscribe the whole or a part of the capital of the central bank. The twelve Federal Reserve Banks of the United States are the only examples of central banks which are owned solely by commercial banks. When the Federal Reserve System was brought into being, all the national banks[4] were required to become members of the System, while the State banks[5] which conformed to certain requirements and conditions could become members on application. All these member banks had to subscribe for stock of the Federal Reserve Bank in their particular area to the amount of 6 per cent of their capital and surplus, and of this amount one-half was to be paid up and the other half to be at call

In Mexico, all banks receiving deposits for less than 30 days were required, in 1932, to take shares in the Bank of Mexico up to an amount of at least 6 per cent of their capital and reserves. This requirement was subsequently imposed also on branches of foreign banks; and in 1936 it was applied to all banks and credit institutions authorized to receive sight, fixed or savings deposits

In the Union of South Africa, Chile, Colombia, Peru, Cuba, Ecuador and Salvador, the banks were likewise required to subscribe a part of the capital of the central bank, on the basis of a proportion of their paid-up capital and reserves. In South Africa, however, the banks were subsequently relieved of the obligation to hold a certain amount of Reserve Bank stock, as a result of which

[1] The National Bank of Belgium, which had been established as a privately-owned institution in 1850, was semi-nationalized in 1948 as a result of the doubling of its capital and the Government subscribing the whole of the additional capital

[2] While the Federal Government of Switzerland does not own any part of the capital of the National Bank, the Cantons have a substantial shareholding in the Bank.

[3] In Western Germany there is a central bank in each of the several constituent 'Länder' of the Federal Republic as well as a central supervising and co-ordinating institution called the 'Bank Deutscher Lander' While the Federal Government does not at present hold any share in the capital of the central banking system, the 'Land Central Banks' are owned by the respective 'Land Governments', and the former, in turn, subscribed the whole of the capital of the 'Bank Deutscher Lander'.

[4] Banks operating under the National Bank Act of the Federal Legislature

[5] Banks operating under laws or charters of the individual States.

they sold most of their holdings to the public.

In Italy, where the capital of the central bank had formerly been held entirely by private persons, provision was made in 1936 for the repayment to these shareholders of the capital and part of the reserves and for the subscription of the new capital by 'public law' banks and credit institutions, savings banks, insurance companies and provident societies.

Distribution of Profits. In the case of almost every State-owned central bank, the whole of the annual profits, after providing for a maximum allocation to the reserve fund, is to be paid to the Government as the only shareholder or proprietor. In some instances, however, as in Australia, part of the surplus profit is to be paid into the National Debt Sinking Fund.

With regard to other central banks, provision has been made for the Government sharing in their profits, whether it owns a part of the capital or not. Where the Government is a shareholder, it is entitled to a portion of the profits in accordance with a scale or procedure laid down by statute, in addition to receiving dividends in respect of its shareholding on the same basis as other shareholders.

Two principal methods have been devised for ensuring an adequate share to the Government in the profits of such institutions. The one method is that of providing for a cumulative dividend of, for example, 6 per cent in the case of the Federal Reserve Banks, the National Bank of Belgium and the South African Reserve Bank, as a first charge on the net profits, and thereafter a division of profits between the reserve fund, the Government and the shareholders, or just between the reserve fund and the Government. Thus, the Federal Reserve Banks were to pay a cumulative dividend of 6 per cent., which was also the maximum, while the balance of the profit was to be allocated to the surplus fund until it amounted to the subscribed capital; and thereafter 10 per cent of the excess profit was to be paid into the surplus fund and the remainder to the Government.[1] The South African Reserve Bank, on the other hand, was to pay a cumulative dividend of 6 per cent., while the surplus was to be allocated to the reserve fund until the latter amounted to one-

[1] In 1933 this provision was amended to the effect that the whole of the net earnings, after payment of a cumulative dividend of 6 per cent, was to be paid into the surplus fund of the Federal Reserve Bank concerned. In 1947, however, it was decided to levy an interest charge on Federal Reserve notes issued by the Federal Reserve Banks, with a view to restoring to the Treasury the payment by the Federal Reserve Banks of approximately 90 per cent. of their net annual earnings

quarter of the capital; thereafter and until the reserve fund equalled the capital, one-half of the surplus was to be allocated to the reserve fund, one-quarter to the Government and one-quarter to shareholders up to a total maximum dividend of 10 per cent, and any balance remaining was to be paid to the Government; and when the reserve fund equalled the capital, the whole of the profit after a payment of a dividend of 10 per cent was to go to the Government.[1]

The second method was that of providing for the payment of a specified proportion of the net profits to the reserve fund as a first charge on the profits, and a minimum dividend to shareholders as a second charge, the remainder to be divided between the Government and the shareholders in accordance with a prescribed scale This method has been followed in Portugal, Switzerland, Mexico, Chile and Colombia.

In general, it may be said that the Government claimed a share in the profits of the central bank because the latter was granted a monopoly of the note issue, which usually constituted a valuable privilege not only for purposes of control, but also as a source of profit. The Government's share was also intended in many cases to operate as a means of restraining the incentive to make large profits, and for this purpose statutory limits were likewise imposed in most instances on dividends to shareholders and on allocations to reserve funds.

Administration of Central Banks. As in the case of banking institutions generally, every central bank is administered by a Board of Directors or the equivalent of such a Board, whether called a Council of Administration (as in Mexico), or a Council of Regents (as in Belgium), or a General Council (as in Denmark, France, Spain and Switzerland), or a Superior Council (as in Italy), or a Supervisory Council (as in Norway), or a Board of Commissaries (as in Holland), or a Policy Board (as in Japan), or a Monetary Board (as in Ceylon and several Latin-American countries). In some countries, however, such as Belgium, Denmark, Holland, Japan, Norway and Sweden, the central bank also has a Management Board to attend to the daily business of the bank, consisting of the Governor or President as Chairman, the Deputy-Governor or Vice-President and from two to four other members who are, in most instances, full-time members. In the Bank of

[1] In 1944, however, when the reserve fund was already equal to the capital, it was provided that one-tenth of the surplus remaining after payment of the maximum dividend of 10 per cent. was to be allocated to the reserve fund before the balance was paid to the Government

England, on the other hand, while there is no formal Management Board, there are four full-time executive directors besides the Governor and Deputy-Governor.

With regard to the extent of participation by the State in the appointment of directors, a distinction must first be drawn between entirely State-owned central banks and others. In the case of the former, all the directors are, with few exceptions, appointed by the Government, whether through the medium of the Head of the State (King, President or Governor-General), as in England, Australia, New Zealand and some Latin-American countries, or by the Cabinet or Council of Ministers, or directly by the Minister of Finance with or without the statutory requirement of Cabinet approval, as in Canada and Ireland respectively. In Sweden and Norway, however, the directors are appointed by the Legislature,[1] with the exception of the Chairman who is appointed by the King; and in Denmark eight of the directors are elected by the Legislature from amongst its own members, two by the Minister of Trade, Industry and Shipping, and the remainder by the other directors.

As regards the central banks in which the State owns only a part of the capital or none at all, it has claimed varying degrees of participation in the appointment of the directors and of the Governor and Deputy Governor(s) or President and Vice-President(s) who are, with some exceptions, also members of the Board of Directors. Thus, for example, in Portugal three out of the thirteen directors of the central bank are appointed by the Government; in Belgium five out of fifteen; in Chile three out of ten; in the United States[2] and Colombia three out of nine; in Peru four out of eleven; in Mexico and Venezuela five out of nine; in the Union of South Africa five out of eleven, in Pakistan eight out of eleven; and in Switzerland twenty-five out of forty. In Italy and Salvador, however, all the directors are elected by the general meeting of shareholders, except the President who is nominated by the Board of Directors with the approval of the Government.

In some of the countries where commercial banks have been required by law to subscribe the whole or part of the capital of

[1] In Sweden, although it is not provided in the statute of the Riksbank, the general practice is to appoint three members of the Legislature to the Board of Directors of the Bank

[2] In each of the twelve Federal Reserve Banks, the three directors concerned are not appointed directly by the Government but indirectly through the Board of Governors of the Federal Reserve System, all of whose members are appointed by the President of the United States

the central bank, they have been given the right to nominate some of their directors or employees as directors of the central bank. In the United States, for example, three out of the six directors of each Federal Reserve Bank elected by its member banks shall be representatives of such banks; and in Mexico the four, in Peru and Chile the three, and in Colombia the two, directors elected by the shareholding banks may be directors or employees of such banks. In South Africa, the share-holding banks were also originally authorized to nominate three bank representatives as directors of the central bank, but this authority was subsequently withdrawn.

In several countries, moreover, provision has been made for Treasury representation on the Board of Directors of the central bank. In Australia, for example, the Secretary of the Treasury is a director with voting power, while in New Zealand the Secretary of the Treasury, and in Canada the Deputy-Minister of Finance, is also a director, but without the right to vote. In Argentina, the Minister of Finance and the Under-Secretary of the Treasury are now the President and Vice-President, respectively, of the Board of Governors of the central bank; and likewise in several other Latin-American countries, as well as in Indonesia, Ceylon and the Philippines, the Minister of Finance, or the Secretary of the Treasury, is now the chairman or a member of the controlling board of the central bank. In Belgium and Holland, on the other hand, there is a Royal Bank Commissioner who supervises the operations of the central bank on behalf of the Government.

As far as the relationship between the Board of Directors and the chief executive officers are concerned, the latter are not only members of the Board in the majority of central banks, but provision is also made for the Governor or President (as full-time officer) to preside at Board meetings and at General Meetings of shareholders where there are private shareholders, and for the Deputy-Governor or Vice-President (or the senior one where there are two or more) to act as Chairman in the absence of the Governor or President. As exceptions the following central banks can be mentioned: the Riksbank of Sweden and the Bank of Norway, where the Chairman is the director appointed by the King; the National Bank of Denmark, the Bank of Mexico, the Central Bank of Chile and the Central Reserve Bank of Peru, where the Chairman (sometimes called President) is appointed by the directors from amongst themselves or from outside; the Central Bank of Argentina, where, as stated above, the Minister

of Finance is the Chairman (President) of the Board; and the Federal Reserve Banks, where the Chairman of the Board of Directors of each Federal Reserve Bank is nominated by the Board of Governors of the Federal Reserve System from amongst the three directors whom it appoints to each Board of Directors.[1]

There are also various exceptions to the general rule of appointments of chief executive officers by the Government. The Presidents and Vice-Presidents of the Federal Reserve Banks, for example, are appointed by the Boards of Directors subject to the approval of the Board of Governors; the Governor of the Riksbank of Sweden is appointed by the Board of Directors from amongst themselves, and the Deputy-Governor either from amongst themselves or from outside; the Governor and Deputy-Governor of the Bank of Canada are nominated by the Board of Directors with the approval of the Government; and the Director-General of the Bank of Mexico is appointed by the Council of Administration (Board of Directors).

State Control over Central Banks. The process of nationalization of central banks was accompanied by wider powers of State control over their policy and operations. The extent to which this factor was reflected in different countries, however, depended upon the domestic political conditions or the stage of constitutional or economic development which had been reached in the country concerned.

In some countries the only practical change was to give statutory definition to the relationship which had already been satisfactorily established between the central bank and the Government prior to nationalization. The new statute of the Bank of England, for example, merely provides that 'the Treasury may from time to time give such directions to the Bank as, after consultation with the Governor of the Bank, they think necessary in the public interest'. When the Reserve Bank of India was nationalized in 1948, a similar provision was included in the new Act; and in the case of the Netherlands Bank, while the Minister of Finance was empowered to give directions to the Bank 'in order to co-ordinate the Government's monetary and financial policy and that of the Bank', the Bank was specifically authorized to appeal to the Crown in the event of disagreement with such directions.

Furthermore, in Canada, where the central bank has apparently

[1] In the Federal Reserve Banks, moreover, the President is not a member of the Board of Directors This also applies, for example, to the Director-General or General Manager of the Bank of Mexico and some other Latin-American central banks

maintained a semi-independent status in spite of nationalization as far back as 1938, the Minister of Finance who introduced the relevant Bill was reported to have given as the reason for nationalizing the Bank of Canada the fact that there had been a good deal of political controversy throughout the country with respect to monetary policy generally and the constitution of the Bank, and that it was highly undesirable and very much against the national interest that there should be continued political bickering concerning the constitution of the Bank itself[1] In Belgium, moreover, the explanation given by the Government on the introduction of the Bill for semi-nationalization of the National Bank in 1948 was to the effect that 'while not desiring the nationalization of the Bank of Issue, and without making the Governor of the Bank a functionary dependent on the Minister of Finance, it was felt necessary still further to ensure both the complete independence of the National Bank vis-à-vis private interests and its collaboration in the general policy of the public authorities' This explanation sounds very much like a half-hearted compromise against pure political pressure The nationalization of the Bank of England and the Netherlands Bank would also appear to have been largely a concession to partisan political feeling.

There are, however, various countries where the outcome of nationalization was either a more or less formal subordination of the central bank to the Government, or at least a substantial decline in the status of the central bank in monetary and banking matters relative to that of the Treasury Thus, in all the new Communist States of Europe, as in Russia, the Government formally directs monetary and banking policies and uses the central bank merely as an instrument for carrying out such policies. Similarly in Argentina the central bank has recently become a subsidiary institution attached to the Ministry of Finance. In several other Latin-American countries, although the central bank has retained its separate status, its monetary policy has by law to be submitted to the Minister of Finance for approval or prior review. Likewise, when the Reserve Bank of New Zealand was nationalized in 1936, the new Act provided that 'it shall be the general function of the Reserve Bank, within the limits of its powers, to give effect as far as may be to the monetary policy of the Government, as communicated to it from time to time by the Minister of Finance', while in an Amendment Act of 1939 it was further laid down that 'the Governor and the Board of

[1] See Milton L Stokes. *The Bank of Canada*, p 238

Directors shall have regard to any representations that may be made by the Minister of Finance in respect of any functions or business of the Reserve Bank, and shall give effect to any decision of the Government in relation thereto conveyed to the Governor in writing by the Minister of Finance'. In Australia, also, when the Board of Directors of the Commonwealth Bank was abolished in 1945 and the management of the Bank was entrusted to a Governor responsible only to the Treasury, it was provided that 'the Bank shall, from time to time, inform the Treasurer of its monetary and banking policy'; that 'if the Treasurer and the Bank are unable to reach agreement, the Treasurer may inform the Bank that the Government accepts responsibility for the adoption by the Bank of a policy in accordance with the opinion of the Government'; and that 'the Bank shall then give effect to that policy'

Various reasons can be advanced for the pronounced trend towards State ownership and control of central banks In the first place, it can be attributed to the universal abandonment of the gold standard and to the consequent greater scope and need for monetary management which in one way or another involved the State in taking direct or ultimate responsibility for the broad monetary policy to be followed by the central bank. Secondly, it can be ascribed to the widespread adoption of a deliberate policy of relatively cheap money as an anti-deflationary or reflationary measure during the 'thirties, and subsequently as a cheap and easy means of financing the war and post-war reconstruction Such a cheap-money policy was, of course, rendered possible by the prevailing systems of managed currency which tempted and enabled Governments to take the line of least resistance and to use the central banking machinery of credit creation for the purposes of the State. Thirdly, it can be associated with the marked trend of public opinion towards socialism and the welfare state after the Great Depression of 1930-33 and, consequently, towards direct State control of monetary and banking policy as a means of ensuring full employment and social security under all circumstances. Finally, it was stimulated by the extension of general Government control and intervention during the war, much of which still remains in many countries, and also by the post-war spread of communism

As far as State control is concerned, there have, however, been some signs of a reversal of trend in the relations between the Government and the central bank. In New Zealand, for example,

an Amendment Act of 1950 provided that the Governor and the Board of Directors of the Reserve Bank had henceforth to give effect to resolutions of the House of Representatives in respect of any functions or business of the Bank, instead of, as was previously the case, to decisions of the Government. On the other hand, the Bank was still to carry out, as far as possible within the limits of its powers, the monetary policy of the Government as communicated to it from time to time by the Minister of Finance; but the broad monetary policy to be followed by the Bank was defined by Parliament in another provision in the Act which directed the Bank to do all such things as it deemed necessary or desirable to promote and safeguard a stable internal price level and the highest degree of production, trade and employment that could be achieved by monetary action. In Australia, furthermore, the new Commonwealth Bank Act of 1951 not only re-established a Board of Directors consisting of the Governor, Deputy Governor, Secretary to the Treasury and 7 other members, with power to determine the policy of the Bank, but also changed the relationship between the Bank and the Government in the sense that while, in the event of disagreement between the Bank and the Treasurer on any matter of monetary and banking policy, the Government might still determine the policy to be followed by the Bank, the Treasurer was henceforth to lay before Parliament a copy of the order determining the policy as well as separate statements by the Government and the Bank concerning the matter in respect of which the difference of opinion arose.

In Australia and New Zealand, therefore, the central bank has been given some measure of protection against undue pressure from the Government in that Parliament has now been brought directly into the picture, which at least ensures open discussion of the issues at stake in any disagreement between the central bank and the Government. The relevant changes in the statutory relationship between the two parties can be interpreted as a distinct improvement in the status of the central bank.

This reversal of the general trend is, no doubt, associated with the recent swing to the right in the countries concerned, and it is not improbable that a similar development may also take place in other countries, with or without a change of Government. A powerful factor now working in the direction of lesser subservience or subordination of the central bank to the needs or desires of the Government is the growing conviction amongst an increasing number of people in many countries that it was

the excessive use of central bank credit by the State for war or other unproductive purposes, which had been mainly responsible, either directly, or indirectly through its expansive effect on commercial bank credit, for the phenomenal world-wide monetary inflation of the past two decades. In short, it is increasingly felt in the realms of both official and public opinion that a semi-independent central bank, free from direct partisan political intervention, can at least be relied upon to offer resistance against undue abuse of monetary management and to serve as a bulwark or safeguard against a catastrophic decline in the value of money.

Whatever the attitude of central banks may have been in some countries in the days of the international gold standard or in the early stages of modern managed currency, there should no longer be any doubt that every central bank, whether wholly or partly owned by the State or by private stockholders, has for years accepted the position that the broad monetary policy of the country should be laid down by the Government or the Legislature, and that, because of the great importance of its functions and operations to the material welfare of the nation, the central bank should be subject to some measure of State control. On the other hand, the central bank is obviously in the best position to assist the Government in the formulation and execution of its monetary policy, and from this point of view alone it is clearly in the interests of the Government and the country as a whole to get independent and objective advice from the central bank on such vital and complicated matters as money, banking and exchange.

It is the continued recognition of these factors which, in the Union of South Africa, has hitherto played a major part in maintaining the private ownership of the central bank as well as the provision that six directors should be elected by stockholders and five (including the Governor and Deputy Governor) appointed by the Government. Thus, for example, the Minister of Finance stated in Parliament, in 1944, when a new statute for the South African Reserve Bank was under discussion, that the Government 'preferred a Board with at any rate theoretical independence', and that, 'while the Treasury, the State, has all the power behind the scenes, . . . we can nevertheless benefit from the independent advice and objective judgment of outsiders in connection with the important question of money and rates of exchange'. In general, the existing constitution of the central bank is accepted in South Africa as a satisfactory compromise

and as an effective combination of the advantages of State control of monetary policy with those of private ownership and semi-independence of the central bank.

In conclusion, it must also be emphasized that mere statutory provision for independent ownership and management of the central bank has not proved to be sufficient. There are examples of State-owned central banks which are operated as semi-autonomous institutions and are known to have suffered less intervention and pressure from the State in difficult times than some central banks in whose capital or management the State has a minority share, if at all. In short, the particular constitution of the central bank is not the only important matter to be considered. Nevertheless, although private or semi-private ownership of the central bank affords no automatic guarantee against undue State intervention and pressure, it has been found in practice to be of considerable assistance not only in strengthening the hands of the central bank vis-à-vis the general public, but also in facilitating the Government's task of maintaining a large measure of political independence for the central bank if it is desirous of doing so.

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